Special Edition: OUR SPECTACULAR 50th ISSUE!

::feel smart again::

mental floss®

THE 50 MOST INTERESTING PLACES IN THE SPACE-TIME CONTINUUM

+

Inside Houdini's Barrel

The Center of a Black Hole

Warren Buffett's Desk

Inside a Tornado

The Supreme Court's Doomsday Shelter

Mob Boss Cemeteries

Catherine the Great's Backyard Amusement Park

The Tiniest Town in America

Where Antimatter Exists

An Island of Wingless Butterflies

and more!

p.38

July-Aug 2010
volume 9 issue 4
mentalfloss.com

$4.99

AMERICA'S GREATEST IDEA FACTORY

3 HILARIOUS MISFIRES IN PROPAGANDA p.18

NAT GEO AMAZING!
As seen on the NATIONAL GEOGRAPHIC CHANNEL
100 PEOPLE, PLACES, AND THINGS THAT WILL WOW YOU
Melina Gerosa Bellows

Great summer reading and gift idea

Brain Candy

The incredible stories and thrilling images in *Nat Geo Amazing*! are living proof that the world is truly wild, wacky, and wonderful. From strange phenomenon and bizarre cultures, to fascinating creatures, people and places around the globe, it's National Geographic like you've never experienced it before.

- Extreme escapades
- Weird-but-true facts
- Modern mysteries
- Ancient discoveries
- Amazing animals
- Natural wonders

Official Companion Book to the 10-part National Geographic Channel series that begins Friday, July 9, 2010 (7p EST).

natgeotv.com/amazing
Available June 29 wherever books are sold.

NATIONAL GEOGRAPHIC

MENTAL BREAKDOWN

38

THE MOST INTERESTING PLACES IN THE SPACE-TIME CONTINUUM

BY JENNIFER DRAPKIN AND ETHAN TREX

For our 50th issue, we hopped in our hot tub trivia time machine to find the greatest facts in the universe—past, present, and future. Want to know what it's like to look into a black hole, escape from a barrel with Houdini, or chill with dinosaurs on their doomsday? You can find out by flipping to page 38 immediately.

32

BOSTON TECH PARTY: THE WONDERS OF THE MIT MEDIA LAB

BY LINDA RODRIGUEZ McROBBIE

Guitar Hero, the Kindle, Gollum from *The Lord of the Rings*—none of these modern marvels would exist without one tiny laboratory. Discover how MIT's Media Lab is making the world a better place, one mind-blowing invention at a time.

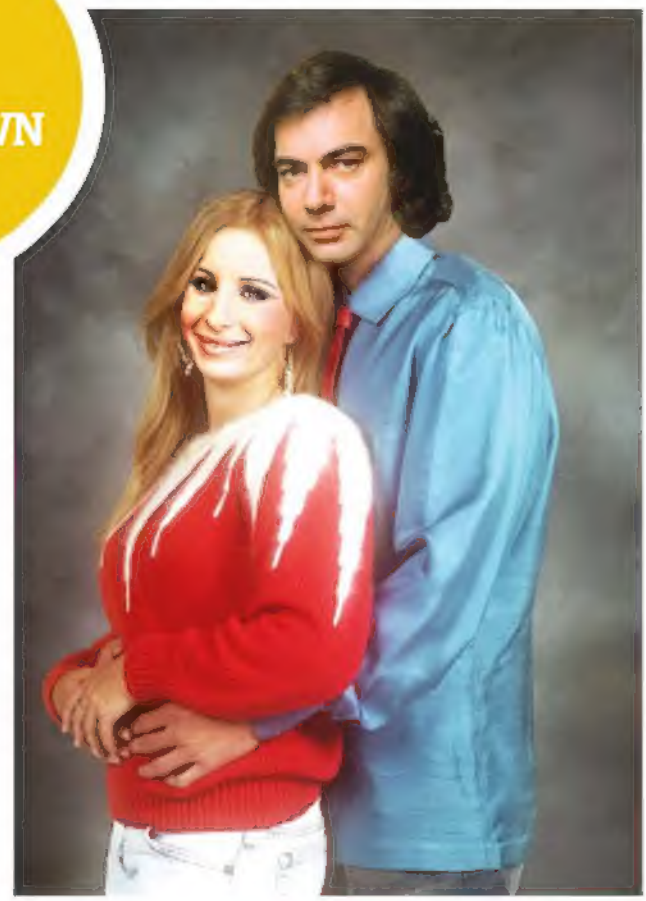
55

4 PUBLIC WORKS OF ART GONE TERRIBLY WRONG

BY ELIZABETH LUNDAY

Step 1: Select a distinguished artist. Step 2: Pay him handsomely to deliver a presidential monument. Step 3: Receive a gigantic statue of a half-naked George Washington draped in a toga? Find out how four patrons went from fawning to fuming, and which artworks drove them there.

MENTAL BREAKDOWN

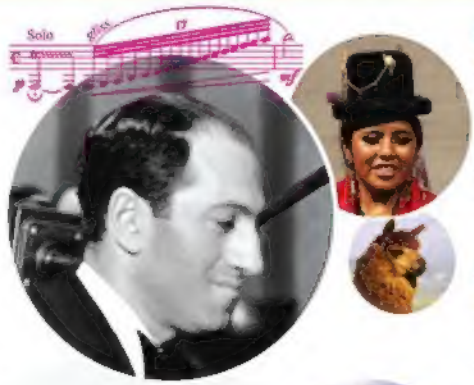


13
SCATTER_BRAINED
High School

***mental_floss* is heading back to school! Join us as we discover the dirty side of marching bands, roam the halls with the original Brat Pack, and swing a few punches in a teenage cage fight. Plus, get the essential facts about some of the smallest, fastest, and most mysterious creatures on Earth—jockeys!**

25
MASTERPIECE #84: **GEORGE GERSHWIN'S *RHAPSODY IN BLUE***
BY BILL DeMAIN
George Gershwin didn't want to write *Rhapsody in Blue*. In fact, he begged to be let off the hook. But when the 26-year old finally put pen to paper, he didn't just transform classical music; he captured the sound of America.

28
THE QUEST FOR A MALARIA VACCINE, AND THE MAN WHO RISKED EVERYTHING TO FIND IT
BY MARY CARMICHAEL
Would you stick your arm into a swarm of 1,000 malaria-infested mosquitoes, all in the name of science? Dr. Stephen Hoffman did, and he's got the bites to prove it. He may even have the vaccine, too.



60
SPINNING THE GLOBE: **BOLIVIA**
BY WENDY DALE
With two national capitals, a language that sounds like sneezing, and landlords who don't charge rent, Bolivia isn't a country you can make sense of on your own. Good thing Wendy Dale is here to help.

68
THE QUIZ
BY KARA KOVALCHIK AND SANDY WOOD

70
SIX DEGREES OF KEN JENNINGS: **JULIUS CAESAR & JULIUS ERVING**
BY KEN JENNINGS

72
THE LISTS
BY STACY CONRADT AND MELISSA SANDOVAL

What's the fastest way to learn a language?

ACT LIKE A BABY.

It's not the advice you'd expect. Learning a new language seems formidable, as we recall from years of combat with grammar and translations in school. Yet infants begin at birth. They communicate at eighteen months and speak the language fluently before they go to school. And they never battle translations or grammar explanations along the way. Born into a veritable language jamboree, children figure out language purely from the sounds, objects and interactions around them. Their senses fire up neural circuits that send the stimuli to different language areas in the brain. Meanings fuse to words. Words string into structures. And language erupts.

Three characteristics of the child's language-learning process are crucial for success:

First, and most importantly, a child's natural language-learning ability emerges only in a speech-soaked, immersion environment free of translations and explanations of grammar. Second, a child's language learning is dramatically accelerated by constant feedback from family and friends. Positive correction and persistent reinforcement nurture the child's language and language skills into full communicative expression. Third, children learn through play, whether it's the arm-waving balancing act that announces their first step or the spluttering preamble to their first words. All the conversational chatter skittering through young children's play with parents and playmates — "...what's this..." "...clap, clap your hands..." "...my ball..."— helps children develop language skills that connect them to the world.

Adults possess this same powerful language-learning ability that orchestrated our language success as children.

Sadly, our clashes with vocabulary drills and grammar explanations force us to conclude it's hopeless. We simply don't have "the language-learning gene." At Rosetta Stone, we know otherwise. You can recover your native language-learning ability as an adult by prompting your brain to learn language the way it's wired to learn language: by complete immersion. Our award-winning, computer-based method does just that. Dynamic Immersion® unlocks the innate language-learning ability you acquired before birth and mastered as a child. By recreating the immersion context in which you learned your first language, you understand, speak, read and write your new language with confidence and accuracy from the beginning — without translations and explanations. At every step and in every skill, you receive instant, actionable feedback, including speech recognition and analysis technologies that prepare you for everyday conversations. And Adaptive Recall® brings back material just when you need it to reinforce and perfect your learning.

Every act of learning is an act of play for children and there's no reason it should be different for learners of any age.

With Rosetta Stone® programs, you rediscover the joy of learning language. Clever, puzzle-like activities produce sudden "Aha!" moments and astonishing language discoveries. Your "language brain" remembers. We see it all the time. A slow smile sneaks across the learner's face after just a few screens. It's a smile of recognition, as though the brain suddenly recalls what it was like to learn language as a child, as though it realizes, "Aha! I've done this before." Act like a baby? You bet. Visit our website and find out how you can reactivate your own innate, language-learning ability with Rosetta Stone. It's the fastest way to learn a language. Guaranteed.*

SAVE 10% TODAY WHEN YOU ORDER

Version 3 Personal Edition CD-ROM products.

Level 1	Reg. ~~$229~~	**$206**
Level 1,2,&3	Reg. ~~$539~~	**$485**
Level 1,2,3,4,&5	Reg. ~~$699~~	**$629**

More than 30 languages available.

WIN/MAC compatible.

SIX-MONTH, NO-RISK, MONEY-BACK GUARANTEE.*

PICK UP A NEW LANGUAGE TODAY.
(877) 216-7966 RosettaStone.com/fjs070
Use promo code fjs070 when ordering.

RosettaStone®

©2010 Rosetta Stone Ltd. All rights reserved. Offer limited to Version 3 Personal Edition CD-ROM products purchased directly from Rosetta Stone, and cannot be combined with any other offer. Prices subject to change without notice. Offer expires November 30, 2010.
*Six-Month, No-Risk, Money-Back Guarantee is limited to Version 3 CD-ROM product purchases made directly from Rosetta Stone and does not include return shipping. Guarantee does not apply to any online subscription, or to Audio Companion® CDs purchased separately from the CD-ROM product. All materials included with the product at time of purchase must be returned together and undamaged to be eligible for any exchange or refund.

mental_floss
magazine

VOLUME 9, ISSUE 4 | July/August 2010

FOUNDERS
Mangesh Hattikudur
Will Pearson

EDITORIAL
Neely Harris, EDITOR-IN-CHIEF
Jennifer Drapkin, SENIOR EDITOR
Sandy Wood, RESEARCH EDITOR
Kara Kovalchik, RESEARCH EDITOR
Katherine Standridge, COPY EDITOR
Jason English, WEB EDITOR

ART
Winslow Taft, SENIOR ART DIRECTOR
Terri Dann Osborne, ASSOCIATE ART DIRECTOR

Nanette Ronis, DIRECTOR OF CUSTOMER SERVICE
Dana Rowan, MARKETING SPECIALIST
Jeffrey Kovick, MARKETING DIRECTOR

EDITORIAL ADVISORY BOARD
Jerrold Footlick, FORMER SENIOR EDITOR, *NEWSWEEK*
George Hirsch, FORMER PUBLISHER, *RUNNER'S WORLD*
Ceil Cleveland, AUTHOR, FOUNDING EDITOR, *COLUMBIA* MAGAZINE
Samir Husni, MEDIA CONSULTANT (MRMAGAZINE.COM)
Tom Gallagher, SENIOR MANAGING DIRECTOR, INTERNATIONAL STRATEGY AND INVESTMENT GROUP
Leonard Dwares, FORMER PARTNER, WHEELER, WOLFENDEN & DWARES, P.A.

MENTAL FLOSS, LLC
Will Pearson, PRESIDENT & PUBLISHER
Mangesh Hattikudur, VP, PRODUCT DEVELOPMENT
Melanie Maloney, VP, PLANNING AND OPERATIONS
Toby Maloney, VP, BUSINESS DEVELOPMENT
Neely Harris, EDITOR-IN-CHIEF

This issue is dedicated in memory of our friend and advisor, Susan Tifft.

SPECIAL THANKS
Robert Bliwise, Dave Borgenicht, Mike & Lynn Brookshire, Mary Brookshire, Gary Bundzak, Mary Margaret Cofield, Emma and Lily Coltoff, Peter Coyle, Jim and Sue Dann, Richard Dendy, Benjamin Drapkin, Dennis & Adrienne Drapkin, Joan Eisenstodt; Ellen, Charlotte & Bailey English; Katie Finley, Terry Finley, Patti Ganguzza, Greg & Tina, B.J. & Nancy Harris, Brooks & Anna Harris, Shanta Hattikudur, Umesh and Lalita Hattikudur, Bill Hauser, Cathy Hemming, Nick and Rose Hilkemeyer, Sarah Indovina, Heather Ingram, Melissa Iseri, Lizzie Jacobs, Elizabeth Johnson, Nathan W. Johnson, Jean Marie Kelly, Kris Kimel, George & Fran Kovalchik, Judith Kovalik, Steve Lanning, Emily Leithauser, Susan Lennon, Pam Leverett, Don Logan, Lars Lohmann, Leo Maloney, Meg McGinn, Elizabeth McGuire, Ruth McMullen, Stephanie Meyers, Cary Norton, Steven Novak, Barbara Orlovsky, Ben Osborne, Lina Owens, Bill and Paulette Pearson, Georgia Pearson, Penny Rose Pearson, William Pearson, Jake Phelps, Kathleen Pierce, Ken & Rhonda Porzadek, Karen Probasco, Jared Rauen, Jane Cee Redbord, Jason Rekulak, William Vaughn Roberts, Jr., Alex Santoso, Rene Sears, Daniel Seelbinder, Chris Sessoms, Megan Shawver, D. John Spangler, Will & Julie Spearman, Jacob Locke Spearman, Amy Stewart & Jeff Brand, Jim Stewart, Robby Stone, Mary Tom Stubbs, Cyrus and Julia Taft, Cyrus Emmitt Taft III & The Bazelton, Alex Thomas, Barri Thompson, Scout Thompson, Leslie Threlkeld, The Todds, Patti Waite, Jason Wallis, Ryan Wallace, Bob Wayne, John Wood, Jeff Wright.

MENTAL FLAWS
FROM MAY/JUNE 2010:

SPRINGS FEVER
Our "United States of Amazing" cover story made mention of two giant dinosaurs that roam the Earth near Palm Beach, Calif. This made absolutely no sense to readers—mainly because they refused to believe that there was a Palm Beach, Calif. There is, however, a Palm *Springs*, Calif., which is near where the (concrete) dinosaurs reside.

PLAYING WITH FIRE
In last issue's Underground Education piece, we incorrectly stated that 1893 was the 12th anniversary of the Great Chicago Fire. Actually, the date marked its 22nd anniversary. To those who wrote in, thank you for showing us the error of our blaze.

VERSAILLES LANGUAGE
On the back page of the last issue, we stated that the Bayer drug company had to give up some of its trademark rights as part of Germany's WWII reparations. This was a typo, and the passage should have read WWI. Apparently, the folks at Versailles decided that everyone deserved a piece of aspirin after the headache that was the war.

CHECKS FROM THE ANSWER BANK
The answer to Part II, Question 4, of last month's Worksheet was mislabeled. "Mary Was an Unmarried Teenage Mother Too" was a Facebook Group, not an After-School Special. If the latter actually existed, we're guessing it would have featured Molly Ringwald as Mary and James Earl Jones in the role of the manger.

TO SUBSCRIBE: Go to www.mentalfloss.com and click on 'subscribe' - or Call 440.729.7774 - or Mail details to: mental_floss, P.O. Box 421142, Palm Coast, FL 32142

BASIC SUBSCRIPTION RATE:
One year (6 issues) $21.97
Two years (12 issues) $39.97
Canada: Add $10 per year
International: Add $35 per year

TO CHANGE ADDRESS: Go to www.mentalfloss.com, click on "subscribe," click on "change of address" - or call 440.729.7774

QUESTIONS ABOUT YOUR SUBSCRIPTION OR MISSING ISSUES: Call 440.729.7774 - or email customer-service@mentalfloss.com

BACK ISSUES AND OTHER MERCHANDISE:
Visit mentalfloss.com/store - or call 440.729.7774

ADVERTISING: Call Toby Maloney at 440.729.7774 - or email Toby@mentalfloss.com

MEDIA INQUIRIES AND FUNDRAISING INFORMATION:
email Toby@mentalfloss.com - or call Toby Maloney at 440.729.7774

SUBMISSIONS: Go to www.mentalfloss.com; click on 'write for us' on bottom navigation bar

Agencies send orders to: mental_floss @ Palm Coast Data Services / P.O. Box 421142 / Palm Coast, FL 32142

International Newsstand Distribution by CoMag Marketing Group, LLC, New York. Contact: Howard White (508) 984-5085

Printer: R.R. Donnelley and Sons Co.
Legal Services: Bradley Arant Rose and White LLP
Accounting Assistance: Stone, Avant and Co. P.C.

Entire contents copyright 2010, Mental Floss, LLC. All rights reserved. Reproduction in whole or in part without permission is prohibited. Products named in these pages are tradenames or trademarks of their respective companies.

Printed in the United States of America.

~make the world a library~

"Some books are to be tasted,
others swallowed,
and some few to be chewed and digested."
—Sir Francis Bacon

bookcrossing.com™

the karma of literature • free and anonymous

It's not like us to brag, but…

…when college presidents and provosts told *U.S. News & World Report* that the quality of our teaching was among the **best in the nation**, we thought we'd make an exception.

Liberal Arts Colleges

1. Pomona College (CA)
2. Swarthmore College (PA)
3. Davidson College (NC)
3. Oberlin College (OH)
5. Earlham College (IN)
6. Carleton College (MN)
6. Haverford College (PA)
8. Williams College (MA)
9. Reed College (OR)
10. College of Wooster (OH)
11. Centre College (KY)
12. Sewanee–U. of the South (TN)
12. University of N.C.–Asheville*
14. Amherst College (MA)

THE COLLEGE OF
WOOSTER

Independent Minds, Working Together.

www.wooster.edu

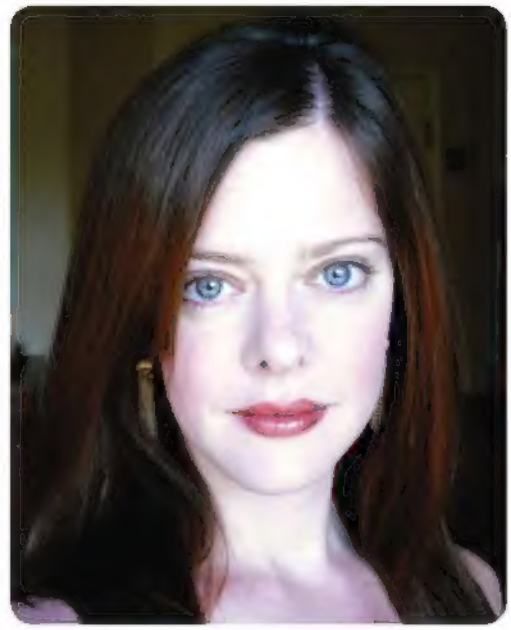
CONTRIBUTORS

Bill DeMain

Bill DeMain has been writing about music, art, and pop culture for ***mental_floss*** since 2008. But researching George Gershwin's *Rhapsody In Blue* (page 25) was his favorite assignment. Why? Because it finally afforded Bill his long-held time-travel fantasy: imagining himself as a snazzy-dressing, pipe-smoking, Tin Pan Alley tunesmith in 1920s' New York. Meanwhile, back in the present, Bill is a Nashville-based musician whose songs have recently been heard on TV's *Private Practice*, as well as in commercials for UNICEF and Philips Water Purifiers.

Wendy Dale

Wendy Dale first visited Bolivia in 1998 to drop in on her parents, who'd moved there at the urging of a guidebook. "The land of eternal spring," her mother had read before relocating. But in 2006, Wendy returned to the country on her own. As the author of the travel narrative *Avoiding Prison and Other Noble Vacation Goals: Adventures in Love and Danger* (Crown, 2003) and the forthcoming young-adult novel *Guerrilla War for Extra Credit* (Dutton), Wendy moved to Bolivia from Los Angeles to write books. But the country's colorful landscape, combined with its history of deposed dictators and exiled criminals (Butch Cassidy and the Sundance kid had their final shootout there!), spoke to the movie-lover inside her. She now calls "Boli-wood" her home, writing and directing short films in Spanish. For her firsthand accounts of life in Bolivia, turn to page 60.



Mary Carmichael

Back in college, Mary Carmichael once killed 45 sea urchins due to bad lab technique. That's why she's not a scientist or, thankfully, a doctor. However, she does play one in print, as a senior writer at *Newsweek* specializing in health and science. She has also worked at *Frontline* and the public radio show "The Infinite Mind" and is the coauthor of ***mental_floss'*** *In the Beginning* and Med School In a Box. She lives in Boston with her husband (who actually is a doctor), her 1-year-old daughter, and a large collection of vintage medical equipment that she hopes to license to someone for the next iteration of *Saw*. Unlike the subject of her interview on page 28, Mary has never had malaria—although she did recently come back from the Dominican Republic with a wicked hangover.

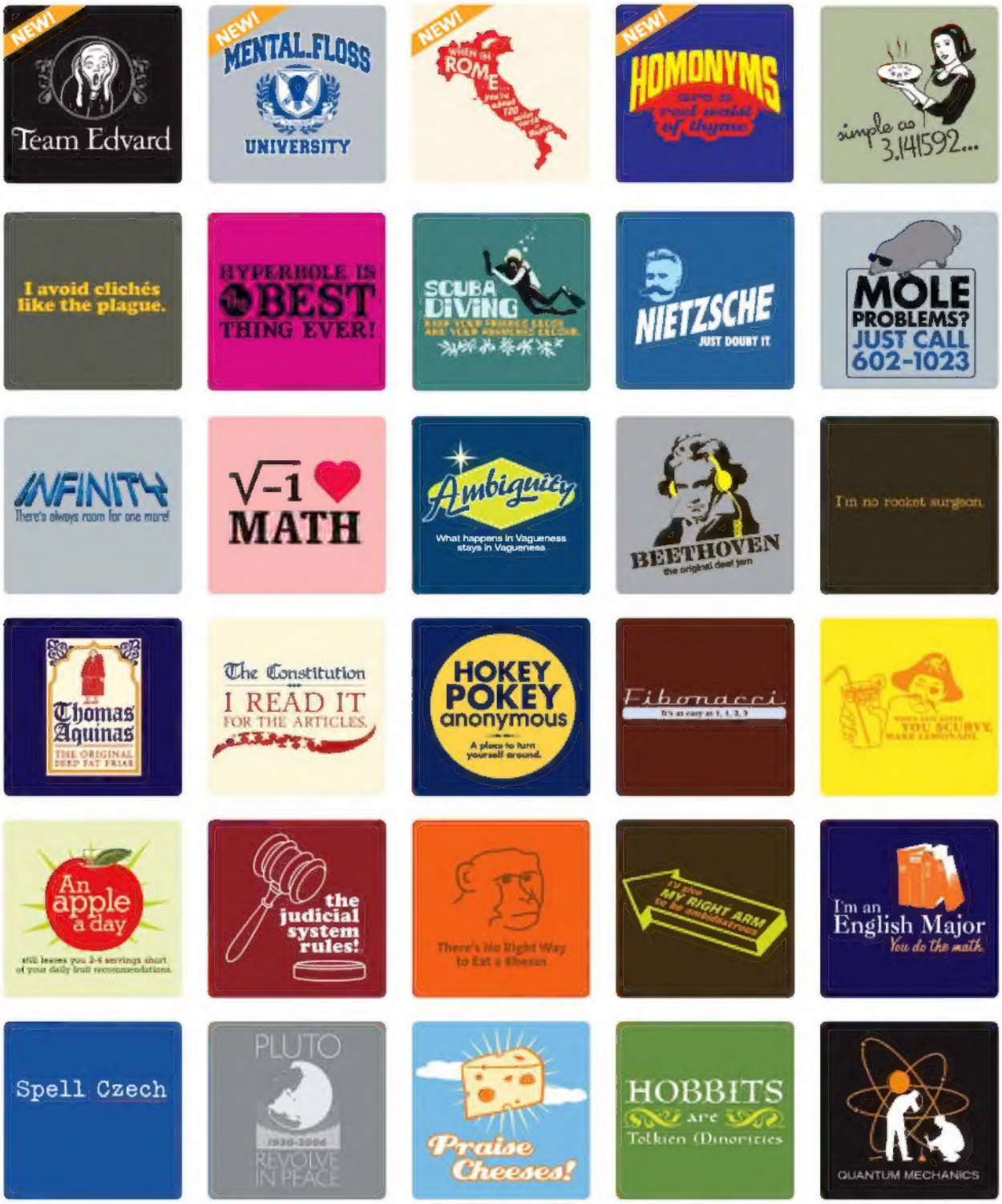
mental_floss Now Offers
Digital Subscriptions
Have your favorite magazine delivered to your inbox, and read every page just the way it appears in print.

Subscribe now!
www.mentalfloss.com/subscribe

Great jokes, now in shirt form!

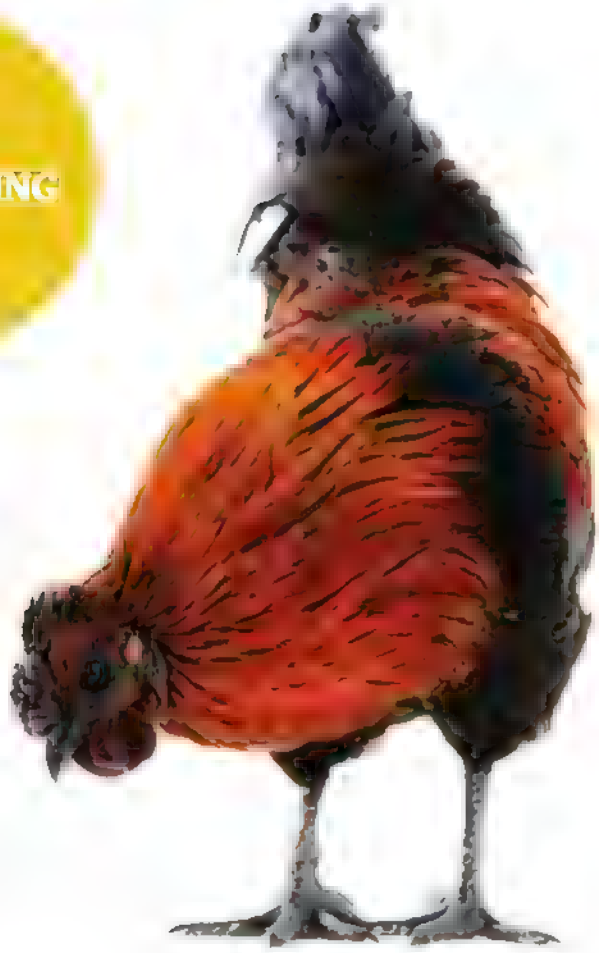
Order online at **www.mentalfloss.com/store**

$17.97 each



MAIL BONDING

Hard Cash, a Herd of Chickens, and Why We Aren't Smarter than a Sixth Grader



PROOF THAT IT PAYS TO READ *MENTAL_FLOSS*

After reading Rob Lammle's "9 Very Rare (and Very Expensive) Video Games" at mentalfloss.com, Tanner Sandlin of Austin, Texas, started digging around in his garage. He knew he'd bought one of the games—Air Raid for the Atari 2600—as a kid, and he was hoping to locate it. To his surprise, he did! In fact, Sandlin's copy is only the 13th copy known to still exist. When he put the game on eBay, it sold for a whopping $31,600!

Congratulations, Tanner! We're not going to tell you what to do with the money, we're just saying you could buy a lot of mental_floss gift subscriptions and T shirts with that kind of cheddar.

NO COUNTRY FOR WILD HENS

In your article "10 Provocative Questions about Raising Chickens" [Mar/Apr 2010], you state that chickens can't really survive in the wild. Come visit the island of Kaua'i, and you may rethink that statement. We have more wild chickens than we know what to do with. In fact, I can see nine in the field next to my house right now.
KYLIE WILSON *KAPA'A, HI*

SHIM ON US

In your May/June 2010 edition of ***mental_floss***, you had an interesting article connecting one of my favorite signs [the Vulcan salute] to my religion. However, you neglected to spell the Hebrew letter *shin* right. Any 6th-grade Hebrew school student could tell you that. I know this for a fact!
SAMMIE C.

A CALL TO FLOSS Reader mail makes us feel warm and fuzzy, so show us some love. If we publish your letter in the magazine, we'll send you a free ***mental_floss*** T-shirt. Email us at letters@mentalfloss.com, or send your mail to: ***mental_floss*** magazine, 2829 2nd Ave South, Suite 340, Birmingham, AL 35233

In case you missed the big announcement—

or the honorary parades, or the skywriter messages of congratulations—this is ***mental_floss'*** 50th issue! Yes, it's a major milestone in the life of a magazine, and we've been busy celebrating with all the high-profile hoopla you'd expect of such an occasion.

But learning to embrace 50 didn't come easily at first. We fell into the typical traps, splurging on iPads and partying late-night with younger magazines. But 50 fueled some productive urges, too. When we hit our nostalgic phase (High School Scatterbrained, page 13), we took to eating a lot of PB&Js, which not only renewed our love for the comfort food, but also helped us uncover the sandwich's strangely political origins. And when we started contemplating what the future held for us (Boston Tech Party, page 32), we turned to the good folks at the MIT Media Lab, who gave us an awe-inspiring window into the innovations of tomorrow.

More than anything, though, we've been reflecting on the meaning of it all, pondering life's biggest questions. What's at the center of the Earth's core? What actually happened in Pompeii on the day the volcano erupted? How did Houdini *really* escape from those barrels? We needed answers, and what we got was, well, 50 more reasons to celebrate! From Warren Buffett's investment secrets to some helpful tips for your next journey inside a black hole, our cover story (page 38) unlocks an entire universe full of mysteries. So by all means, break out the champagne and keep the parties coming. If this issue is any indication, we're just getting started.

Neely Harris
Editor-in-Chief

© 2008 Jupiterimages Corporation

How Has Christianity Changed over 2,000 Years?

In the first centuries after Christ, there was no "official" New Testament. Instead, early Christians read and fervently followed a wide variety of scriptures—many more than we have today

Relying on these writings, Christians held beliefs that today would be considered bizarre. Some believed that there were 2, 12, or as many as 30 gods. Some thought that a malicious deity, rather than the true God, created the world. Some maintained that Christ's death and resurrection had nothing to do with salvation while others insisted that Christ never really died at all

What did these "other" scriptures say? Do they exist today? How could such outlandish ideas ever be considered Christian? If such beliefs were once common, why do they no longer exist? These are just a few of the many provocative questions that arise from **Lost Christianities: Christian Scriptures and the Battles over Authentication**, an insightful 24-lecture course taught by Professor Bart D. Ehrman, the Chair of the Department of Religious Studies at the University of North Carolina at Chapel Hill and the author and editor of 17 books, including *The New York Times* bestseller *Misquoting Jesus*

This course is one of The Great Courses®, a noncredit, recorded college lecture series from The Teaching Company®. Award-winning professors of a wide array of subjects in the sciences and the liberal arts have made more than 300 college-level courses that are available now on our website

ACT NOW!

1-800-TEACH-12

www.TEACH12.com/4mf

Lost Christianities: Christian Scriptures and the Battles over Authentication

Taught by Professor Bart D. Ehrman,
The University of North Carolina at Chapel Hill

Lecture Titles

1. The Diversity of Early Christianity
2. Christians Who Would Be Jews
3. Christians Who Refuse To Be Jews
4. Early Gnostic Christianity—Our Sources
5. Early Christian Gnosticism—An Overview
6. The Gnostic Gospel of Truth
7. Gnostics Explain Themselves
8. The Coptic Gospel of Thomas
9. Thomas' Gnostic Teachings
10. Infancy Gospels
11. The Gospel of Peter
12. The Secret Gospel of Mark
13. The Acts of John
14. The Acts of Thomas
15. The Acts of Paul and Thecla
16. Forgeries in the Name of Paul
17. The Epistle of Barnabas
18. The Apocalypse of Peter
19. The Rise of Early Christian Orthodoxy
20. Beginnings of the Canon
21. Formation of the New Testament Canon
22. Interpretation of Scripture
23. Orthodox Corruption of Scripture
24. Early Christian Creeds

Order Today!
Offer Expires Wednesday, September 1, 2010

Lost Christianities: Christian Scriptures and the Battles over Authentication
Course No. 6593
24 lectures (30 minutes/lecture)

DVDs ~~$254.95~~ **NOW $69.95**
+ $10 Shipping, Processing, and Lifetime Satisfaction Guarantee

Audio CDs ~~$179.95~~ **NOW $49.95**
+ $10 Shipping, Processing, and Lifetime Satisfaction Guarantee

Priority Code: 40257

THE TEACHING COMPANY®
The Joy of Lifelong Learning Every Day
GREAT PROFESSORS. GREAT COURSES. GREAT VALUE
GUARANTEED.®

BORDERS®

At Borders, we know what moves you. They're the same things that move us! From bestselling books to must-have movies, there's always something to be passionate about at Borders.

shop
Borders.com

HIGH SCHOOL

SCATTER-BRAINED

STICKY SWEET

If taffeta and organza aren't the right looks for the b g dance, duct tape might do the tr'ck. Every year, hundreds of high school students fashion dresses and tuxes out of the uti rty tape for Duck brand's "Stuck at Prom" scho ar sh p contest. And while qua ity of design definite y factors into the judging, so does the quantity of duct tape used (You're probably not going to win with a mini-skirt.)

Awkward High School Memories

BY MEGAN WILDE

FIDEL CASTRO'S TERRIBLE SCHOOL SPIRIT

While tons of kids dream of growing up and taking revenge on their schools, Fidel Castro was one boy who held fast to his ambitions. During his time at Colegio de Dolores, an elite Jesuit high school in Cuba, Castro's classmates called him "Dirtball," supposedly because of the way he smelled. Although Fidel benefited greatly from the first-rate education he got there, it seems the scars of his adolescent nickname never quite healed. In 1961, when Castro was 35 and ruling the country, he returned to his alma mater to dismantle it. He confiscated the buildings and then sent the Jesuit teachers into exile. But Castro couldn't quite stamp out the school's legacy. The "Dolorinos" scurried to Florida, where they opened a new high school in Miami later that same year

THE DIRTY SIDE OF MARCHING BANDS

If marching bands seem like they're full of rejects from the football team and the cheerleading squad, it's kind of a tradition. Marching bands got their start in 1906 in Connersville, Ind., when a music teacher named Dr. W. Otto Miessner saw a group of his students hanging out on the street watching a minstrel show. The teenagers had recently been suspended, and Miessner wanted to get them back in school. So he made them a deal: If they helped him form a brass band, he would pull some strings to end their suspension. As added incentive, Miessner promised that the band would perform at public events and wear fine uniforms in the school colors.

Marching bands have been wearing snazzy outfits ever since, but they haven't always had the best luck keeping them clean. Early on, it became standard practice for marching bands to walk at the back of processions, behind the horses, where manure would inevitably sully their uniforms. No one knows how this tradition got started, but we do know that one band rebelled. As the story goes, the director of the Storm Lake High School band in Iowa put his foot down after tiring of seeing his students trudge through manure. So, he refused to let his band participate in the town's Fourth of July parade until the order of procession was reversed. His request was granted, and the band marched home squeaky clean.

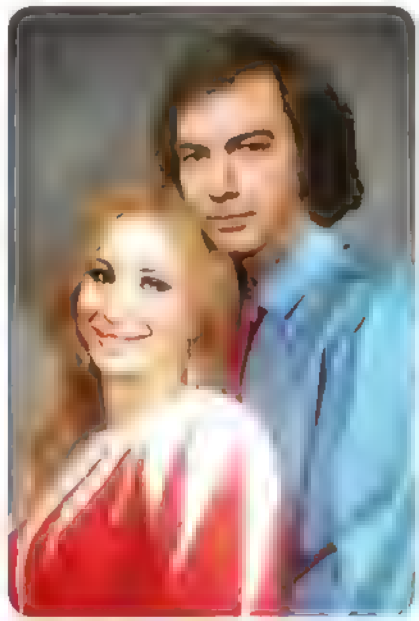
THE BOTTOM LINE High school proms were big deals as early as 1936. That's the year *The Junior-Senior Prom: Complete and Practical Suggestions for Staging the Junior-Senior Prom* was published

Most Likely to Succeed

Remember that jerk who sat behind you in history class? Well, maybe you'll both grow up to be famous—like these people did!

A GIRL AND HER DIAMOND

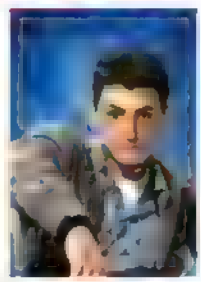
As students at Brooklyn's Erasmus Hall High School, Neil Diamond and Barbra Streisand sang in the same choir and both participated in SING!, a musical theater program for New York City schools. And yet, the two didn't meet until years later, when Streisand covered Diamond's ballad "You Don't Bring Me Flowers." After a Kentucky disc jockey spliced together Diamond's version of the song with Streisand's, the two were inspired to sing it together in real life. In 1978, Diamond and Streisand recorded the duet. It promptly hit No. 1 on the Billboard Hot 100 chart, earning them Grammy nominations for Best Pop Vocal Duo and Record of the Year.



THE ORIGINAL BREAKFAST CLUB

The Brat Pack of 1980s' teen movies had its roots in reality. Rob Lowe, Sean Penn, and brothers Charlie Sheen and Emilio Estevez were all buddies at Santa Monica High School in California. After actor Martin Sheen bought a Super-8 camera for his sons, the crew began making movies together, including one about Penn stealing Estevez's dog. For some of this time, Robert Downey Jr. was also roaming the hallways with the gang, but he dropped out of school during his sophomore year.

Rob Lowe



Sean Penn

IT'S ALL RELATIVE(S)

Before they wrote the Academy Award winning screenplay for 1997's *Good Will Hunting*, Matt Damon and Ben Affleck were childhood friends, growing up a few blocks away from each other in Cambridge, Mass. They played Little League together, took acting classes together, attended the same high school, and both got jobs as extras in 1989's *Field of Dreams*. So it really should come as no surprise that Matt and Ben are related. In 2009, the New England Genealogical Society reported that they are 10th cousins, once removed. Affleck is also distantly related to Princess Diana and 16 U.S. presidents, including Barack Obama.

Charlie Sheen

Emilio Estevez

The Extracurricular Activity that Won't Help You Get into College

Back in the olden days, arguments were settled with bare fists. And by the "olden days," we mean less than a decade ago in Texas. Between 2003 and 2005, the faculty of South Oak Cliff High School in Dallas encouraged its unruly students to "settle it in the ring," meaning that they wanted the kids to resolve their conflicts inside a steel cage. According to a school district report, teens would fight in a wire mesh pen set up in the boys' locker room, to the wild cheers of classmates and teachers alike. The cage fights were curbed as soon as school counselor Frank Hammond found out about the events and broke the first rule of Fight Club. "It was gladiator-style entertainment for the staff," said Hammond. South Oak Cliff High School now has a new principal ... and a new way to deal with classroom conflicts.

MORE
- The Humble Origins of Prom
- Karl Rove's Ridiculous Debate Team Tactics

Visit mentalfloss.com/more

PB&J, Deconstructed

HIGH SCHOOL

BY MEGAN WILDE

SLICED BREAD, THE BEST THING SINCE REGULAR BREAD

In the early 20th century, people across the world cut their own bread, one slice at a time. But in 1902, a Missouri inventor named Otto Frederick Rohwedder couldn't get his bread slices to fit inside the slots of his toaster. Thus began his 26-year quest to invent a bread-slicing machine. Although Rohwedder had a prototype as early as 1912, he soon realized that cutting the bread wasn't enough; he also needed to package the slices in such a way that they wouldn't go stale. By 1928, Rohwedder had modified his machine to wrap the bread in addition to cutting it, and his first loaf of sliced bread was sold that July in Chillicothe, Mo.

But just because it sold, that doesn't mean it sold *well*. For years, sliced bread was a commercial flop. Consumers thought the loaves looked sloppy, and bakeries hesitated to invest in the machines. That all changed in the 1930s, when Wonder Bread hit the shelves. Lured by its colorful red, yellow, and blue packaging, Americans picked up the sandwich slices and put down their bread knives for good.

PEANUT BUTTER,

Health guru Dr. John Harvey Kellogg spent the late 1800s extolling the virtues of vegetarianism at the Battle Creek Sanitarium in Michigan, a spa that welcomed the likes of Thomas Edison, William Howard Taft, and Amelia Earhart. There, Dr. Kellogg also perfected new forms of vegetarian cuisine, including breakfast cereal and peanut butter. He even toured the country, lecturing about the spread's health benefits. In fact, one of these talks possibly changed the course of legume history. When Dr. Kellogg spoke at the Tuskegee Institute in Alabama, George Washington Carver was in attendance; that may have been what piqued his interest in the peanut

THE BOTTOM LINE

It would take 500 million pounds of peanut butter to cover the floor of the Grand Canyon, which happens to be how much Americans consume each year.

AMERICA IS READY FOR THIS JELLY

During its early years, peanut butter was a delicacy, only to be served in upscale tearooms. Chefs combined it with beef, pimientos, Worcestershire sauce, and other ingredients, with limited success. But around 1900, peanut butter met jelly, and the sweet-salty combination was an instant hit with kids. As the commercial peanut butter industry took off, the cost of the spread dropped dramatically. By the time the Great Depression hit, hungry Americans were relying on the PB&J as a cheap, nutritious meal, and later, during World War II, soldiers were scarfing them down on the battlefield. The sandwich has been a national touchstone ever since. Nowadays, the average American child eats about 1,500 PB&J sandwiches before finishing high school.

THE PASSION OF THE CRUST

In 2000, the J.M. Smucker company came to the aid of parents everywhere by patenting and marketing the first crustless peanut butter and jelly sandwich. The frozen, disc-shaped Uncrustables quickly became a top-selling product. All was well until 2001, when a small Michigan grocery store started selling its own crustless PB&Js, and Smucker's sued them for patent infringement. But after a thorough investigation, the U.S. Patent and Trademark Office ruled that the Smucker's version was nothing special. After all, cutting the crust off children's sandwiches is practically an American tradition.

Nowadays, the average American child eats about 1,500 PB&J sandwiches before finishing high school.

Peanut Butter & Red Tape Sandwiches

CAUGHT BREAD-HANDED

In January 1943, U.S. government officials put the kibosh on sliced bread, arguing that it was detrimental to the war effort. They claimed the bread went stale too fast, wasting precious wheat, and that the metal in the slicing machines would be better used for guns, tanks, and ships. When the ban was lifted a few months later, the country rejoiced. A headline in *The New York Times* read, "Housewives' Thumbs Safe Again!"

THE MOST EXPENSIVE PEANUT BUTTER IN AMERICA

Want to know who makes the priciest peanut butter on the market? The federal government, of course! For about $220 per 6-ounce jar, the National Institute of Standards and Technology sells what it calls "Standard Reference Material No. 2387," a pristine peanut butter spread. The price tag comes with a precise analysis of the peanut butter's nutritional composition, including levels of vitamins, minerals, fats, amino acids, and aflatoxins, the carcinogens produced by mold in peanut crops. Food manufacturers use the spread for quality control, comparing it to their own products. Sadly, this means that no one actually eats the gold-standard peanut butter; it's fed exclusively to laboratory equipment.

MORE
- Birthplaces of Great American Foods
- The Story of Girl Scout Cookies

+ plenty MORE at mentalfloss.com/more

CHEERLEADERS

When Propaganda Backfires

BY MAGGIE RYAN SANDFORD

BLONDE BOMBSHELLS

THE PLAN: During WWII, Axis powers attempted to wage psychological warfare against the Allies in a highly unusual way. They'd fly over enemy camps and drop photos of buxom ladies on the troops. The twist? Most of the women were pictured in passionate embraces with strange men.

THE HOPE: According to German officials, the drops were meant to get GIs thinking about their wives and girlfriends back home—specifically, thinking about them being unfaithful. Axis propaganda wasn't always so convoluted, though. Sometimes the Germans simply dropped pictures of scantily clad women posed over quotes such as "You can enjoy this if you surrender."

THE DISAPPOINTMENT: Surprise! Apparently, giving out free pictures of sexy women isn't the best way to demoralize soldiers. Far from being upset, the GIs began collecting the pics and using them as pin-ups.

WISDOM FROM ABOVE

THE PLAN: Soviet leader Joseph Stalin wanted to spread the message of communism far and wide, so in 1934, he enlisted the ANT-20, a massive aircraft with a wingspan of more than 200 feet.

THE HOPE: In addition to its jaw-dropping size, the plane contained multiple radio stations, a photo lab, and even a printing press for distributing leaflets midair. But the best thing about the plane (from a propaganda point of view) was its loudspeaker. Known as the "Voice from the Sky," the sound system was so powerful that it could broadcast speeches and songs to the public from hundreds of feet in the air.

THE DISAPPOINTMENT: Unfortunately for Stalin, the plane's lifespan didn't match its wingspan. In 1935, a fighter plane crashed into the giant aircraft during a demonstration over Moscow, killing 45 people. But that didn't stop the propaganda from living on. Soviet officials quickly blamed the accident on the fighter pilot, Nikolai Blagin, and a new word, *Blaginism*, was introduced into the Russian language. It translates to "a cocky disregard of authority."

BOW TO YOUR NEW RULER

THE PLAN: In 1975, President Ford signed the Metric Conversion Act, and the United States embarked on a full-fledged campaign to join the rest of the world in using meters and grams.

THE HOPE: The federal government tried to get Americans on board by pumping tons of money into the effort. It funded metric-touting posters, pamphlets, and TV spots—including a series of animated shorts by the same team that did "Schoolhouse Rock." There was even an answering service set up to help confused citizens.

THE DISAPPOINTMENT: It turns out that citizens weren't exactly rushing to borrow 225 grams of sugar from their neighbors or to ask the grocer for 3.79 liters of milk. In 1982, President Reagan cut the campaign's funding. Instead, he supported "voluntary metrication," letting Americans choose whether or not they wanted to embrace the new measuring scheme. (They chose not to.)

THE BOTTOM LINE

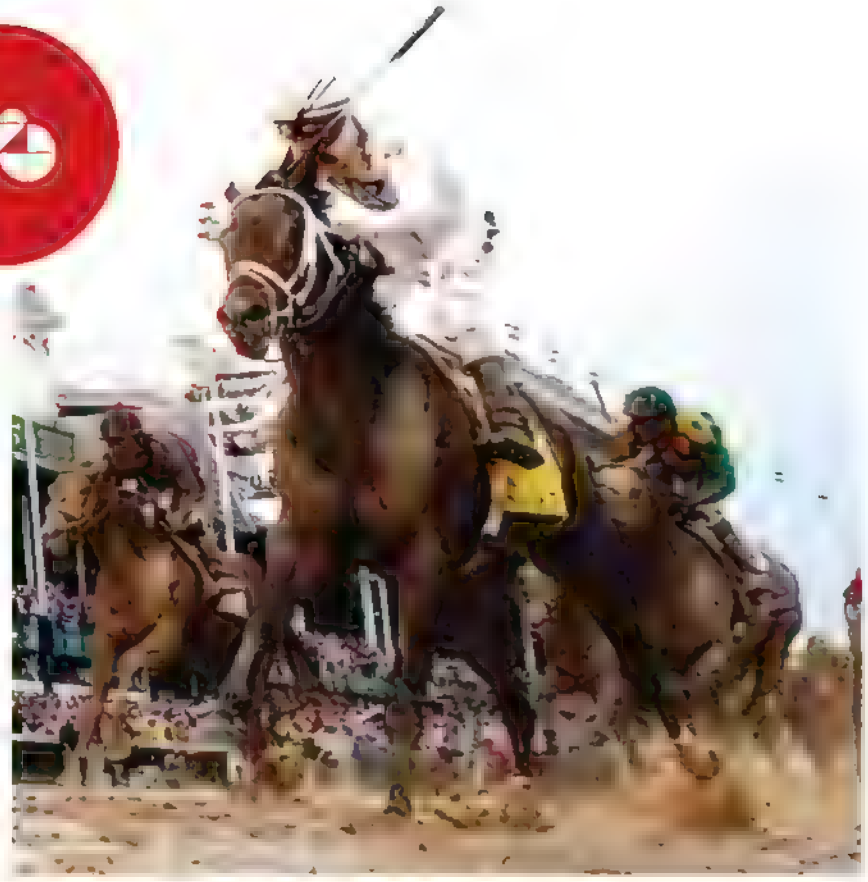
Never let h gh schoo students choose their own mascot. In 1991, the kids at

HIGH SCHOOL

JOCKS

12 Essential Facts about the Folks Who Race Horses

BY ROB LAMMLE



1. At the National Museum of Racing and Hall of Fame in Saratoga Springs, N.Y., humans get less respect than their hoofed pals. Although 179 horses have been inducted there, only 91 jockeys have made the cut.

2. Being a jockey doesn't come with a great benefits package, either. All jockeys are self-employed, so they're responsible for their own business expenses, such as agent fees, travel costs, equipment, and some of the highest health insurance premiums in professional sports.

3. They also can't own the horses they ride, or pick the colors they wear. Instead, jockeys use the registered patterns that belong to whoever hired them.

4. Of course, there are some pluses. While most riders make $35,000 to $45,000 a year, the best earn upwards of $2 million in prize money.

5. Frank Hayes is the only deceased jockey to ever win a race. In 1923, the stable hand somehow convinced one of the owners to let him ride at Belmont Park. To everyone's amazement, he and the horse, Sweet Kiss, won. Unfortunately, Hayes didn't live to see it. He died mid-ride from a heart attack, though his body somehow stayed upright through the finish.

6. **Hayes' victory was just as bittersweet for his horse. Sweet Kiss had to endure the nickname "Sweet Kiss of Death" for the rest of his life.**

7. Speaking of funny names, the odd position that jockeys lift themselves into while racing is called the Monkey Crouch. The stance was universally mocked when American jockey Tod Sloan first introduced it in 1897, but it ended up revolutionizing the sport. Not only did Sloan win a remarkable 48 percent of his races the following year, but according to a study published in *Science*, "horse-race times and records improved by 5 to 7 percent in 1900" as other riders began copying the position.

8. In horse racing, making weight is no joke. To compete in the Kentucky Derby, a jockey plus his equipment can only weigh 126 lbs. That means most weigh less than 118 lbs.

9. This results in some strange eating habits. In an effort to stay trim, Laffit Pincay, Jr., the world's winningest jockey, would take a single peanut, slice it into slivers, and eat just half of it for lunch.

10. This wasn't Pincay's only secret to success. He also used to speed-walk instead of run to avoid putting on any extra muscle. (It's a trick other riders still use.)

11. On the other hand, there's no height limit for jockeys. The tallest rider on record is former NBA player Manute Bol, who stands 7'7". He was licensed by the Indiana Horse Racing Commission to race in a charity event.

12. There are some pretty tall non-NBA riders, too. The next tallest jockey is Denmark's Louise Moeller. She's 6'1".

the Marvelwood School in Connecticut voted to become the Screaming Pterodactyls

HIGH SCHOOL

MOURNING ANNOUNCEMENTS

3 Ways to Sweep the Gloom from the Tomb!

BY BETH SCHWARTZAPFEL

1. GET CREATIVE WITH GRANDMA'S ASHES

Some people scatter ashes; others store them in urns. But if you really want to honor Mamaw and Bubbie, why not transform their cremains into works of art? Several companies specialize in mixing the deceased's ashes in paint, and then using the mixture to create portraits of the deceased. But if canvas doesn't feel like the right canvas, there's an alternative. You can also have your loved one's remains mixed with ink, and then use that to get a tattoo of grandma on your body.

If you're looking to turn the carbon in your dead relative's remains into something more practical, there's a company for that, too. Nadine Jarvis, an artist based in London, makes memorial pencils called Carbon Copies. According to Jarvis, the average body yields enough carbon to make 240 pencils, "a lifetime supply for those left behind." Jarvis stores the pencils in a special box with a sharpener on one side. "Over time," she says, "the pencil box fills with sharpenings, a new ash, transforming it into an urn."

2. GIVE YOUR HOUSEFLY A PROPER FAREWELL

Legend has it that Virgil, author of the *Aeneid*, spent a fortune to bury his pet housefly. Senators and noblemen read eulogies, and a band was hired to play as the tiny coffin was lowered into the ground. It'd be nice to think that Virgil acted out of fondness for his little friend, but the crafty author had a different motive: Virgil was trying to skimp on his taxes. During the 1st century BCE, Roman law required all landowners to hand over their property to soldiers returning from war, or face a heavy fine. But Virgil noticed a loophole; cemeteries and mausoleums were exempt from the rule. By burying his six-legged pal on his property, Virgil technically created the Roman Empire's smallest cemetery, thereby avoiding the tax.

3. THE DEATH OF SOME SALESMEN

At Coffin Academy in Seoul, South Korea, students concentrate on dying right. As part of its four-hour death-simulation seminar, participants write their own eulogies and farewell letters. Then, they climb into a coffin for 10 minutes and witness their own funerals. As owner Jung Joon puts it, "Afterward, you feel refreshed … You're ready to start your life all over again, this time with a clean slate."

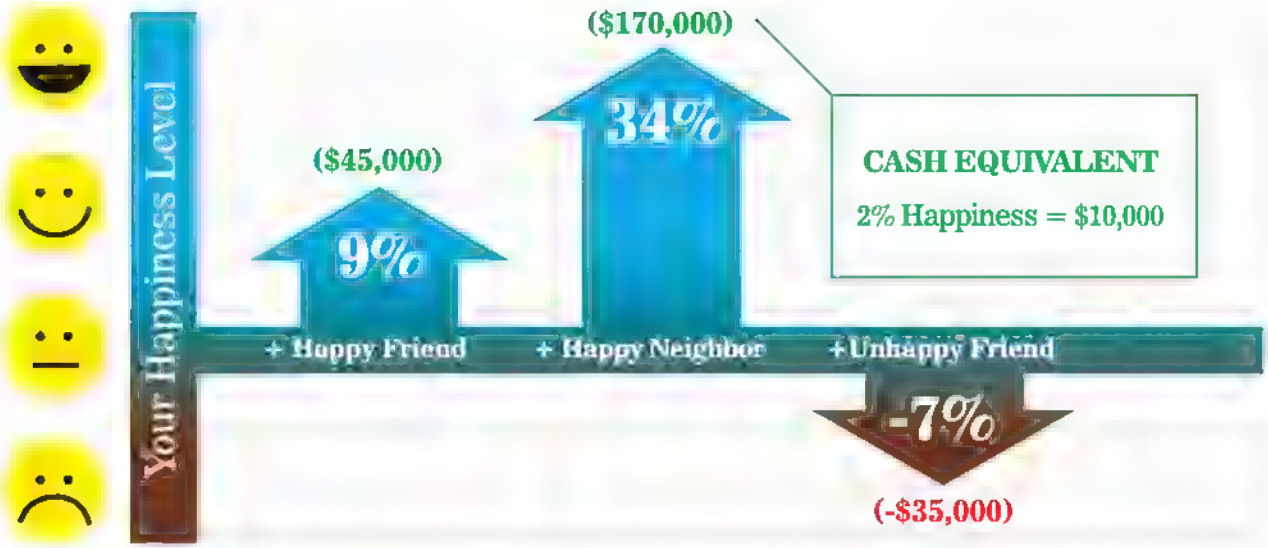
Although the Academy welcomes anyone who wants to play dead, the trend has become particularly popular with businesses trying to encourage teamwork and productivity among their employees. Instead of wasting money on ropes courses and trust falls, some company execs figure that watching your co-workers die should sufficiently inspire you.

THE BOTTOM LINE One benefit of being the President? Ronald Reagan once said, "The day after I was elected, I had my high school grades classified Top Secret."

GEEK CLUB

Q: How Do I Put a Price on Friendship?

BY CHRIS HIGGINS



A: If you're looking to appraise your relationships, scientists have figured out that it all comes down to one thing—whether or not your friends are happy.

A 2008 study published in the *British Medical Journal* revealed that happiness within your social network—your friends, family, co-workers, and neighbors—has an effect on your own contentment. For example, if the person living next door to you suddenly becomes happy, then the probability that you will be happy increases by 34 percent.

But that's not the most surprising part. The same study found that by adding one happy friend to your life, you increase your chances for happiness by 9 percent. This can make for some fun math. According to psychologist James Fowler, author of the book *Connected*, earning an extra $10,000 a year raises the odds that you will find joy in your life by 2 percent. Therefore, if one happy friend increases your chances of happiness by 9 percent, and $10,000 increases your chances by 2 percent, then a happy friend is worth about $45,000.

One caveat: Your new friend has to be *happy*. Befriending a sad person decreases your chances for happiness by 7 percent.

The George Bailey Effect In the 1946 film *It's a Wonderful Life*, a suicidal man named George Bailey sees what the world would have been like if he'd never been born. Not to give the story away ("spoiler alert."), but as the movie goes on, he starts to appreciate everything around him, and that awareness fills him with joy. In an example of life imitating art, recent research suggests that the "George Bailey effect" works. If you imagine the absence of good things in your life, your brain will be temporarily surprised, making you realize how good things really are.

MORE
• Why Does Mint Make Your Mouth Feel Cold?
• Can Soap Get Dirty?
MORE answers at mentalfloss.com/more

THE WORKSHEET

Part I

The Shelf-Awareness Quiz

Can you match these book titles to their subtitles?

1	*Orange Is the New Black*	a	*The Improbable Adventures of an Unlikely Patriot*
2	*The Happiness Project*	b	*Or, Why I Spent a Year Trying to Sing in the Morning, Clean My Closets, Fight Right, Read Aristotle, and Generally Have More Fun*
3	*Although of Course You End Up Becoming Yourself*	c	*One Year in a Women's Prison*
4	*American on Purpose*	d	*A Road Trip with David Foster Wallace*

Part II

Presidential Nicknames or Professional Wrestler?

(1) [illegible]

(2) The Big Bluff

(3) Uncle Jumbo

(4) The Red Rooster

(5) Uncle Cornpone

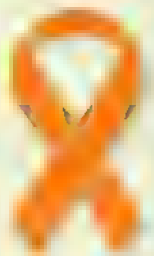
Part III

The Charity Ribbon Quiz

You see them pinned to lapels and stuck to car bumpers, but do you know what they're trying to raise awareness for?

1
a) Workplace Safety
b) Hodgkin's Lymphoma

2
a) SARS Research
b) Attention Deficit Hyperactivity Disorder



3
a) Autism
b) Early Childhood Education

4
a) Online Free Speech
b) Groat's Disease

ANSWERS:

Part I: 1) c (*Orange is the New Black: One Year in a Women's Prison* by Piper Kerman) 2) b (*The Happiness Project: Or, Why I Spent a Year Trying to Sing in the Morning, Clean My Closets, Fight Right, Read Aristotle, and Generally Have More Fun* by Gretchen Rubin) 3) d (*Although of Course You End Up Becoming Yourself: A Road Trip with David Foster Wallace* by David Lipsky) 4) a (*American on Purpose: The Improbable Adventures of an Unlikely Patriot* by Craig Ferguson)

Part II: 1) Pres dential Nickname (Benjamin Harrison) 2) Professional Wrestler (Owen Hart) 3) Presidential Nickname (Grover Cleveland) 4) Professional Wrestler (Terry Taylor) 5) Presidential Nickname (Lyndon Johnson)

Part III: 1) b (Hodgkin's Lymphoma) 2) b (Attention Deficit Hyperactivity Disorder) 3) a (Autism) 4) a (Online Free Speech, Groat's Disease was made up for Curb Your Enthusiasm)

BY JASON ENGLISH

MORE! **Need some trivia to wash down your PB&J?** Check out the Daily Lunch Quiz at mentalfloss.com

DELIVER US

Own it on Blu-ray™ Combo Pack
and rent it with Movies On Demand 6/15

The Book of Eli © 2009 Alcon Film Fund, LLC. Warner Bros. Entertainment Inc. All rights reserved.

Subscriptions make great gifts!

Subscribe

to the Greatest Magazine *Ever*

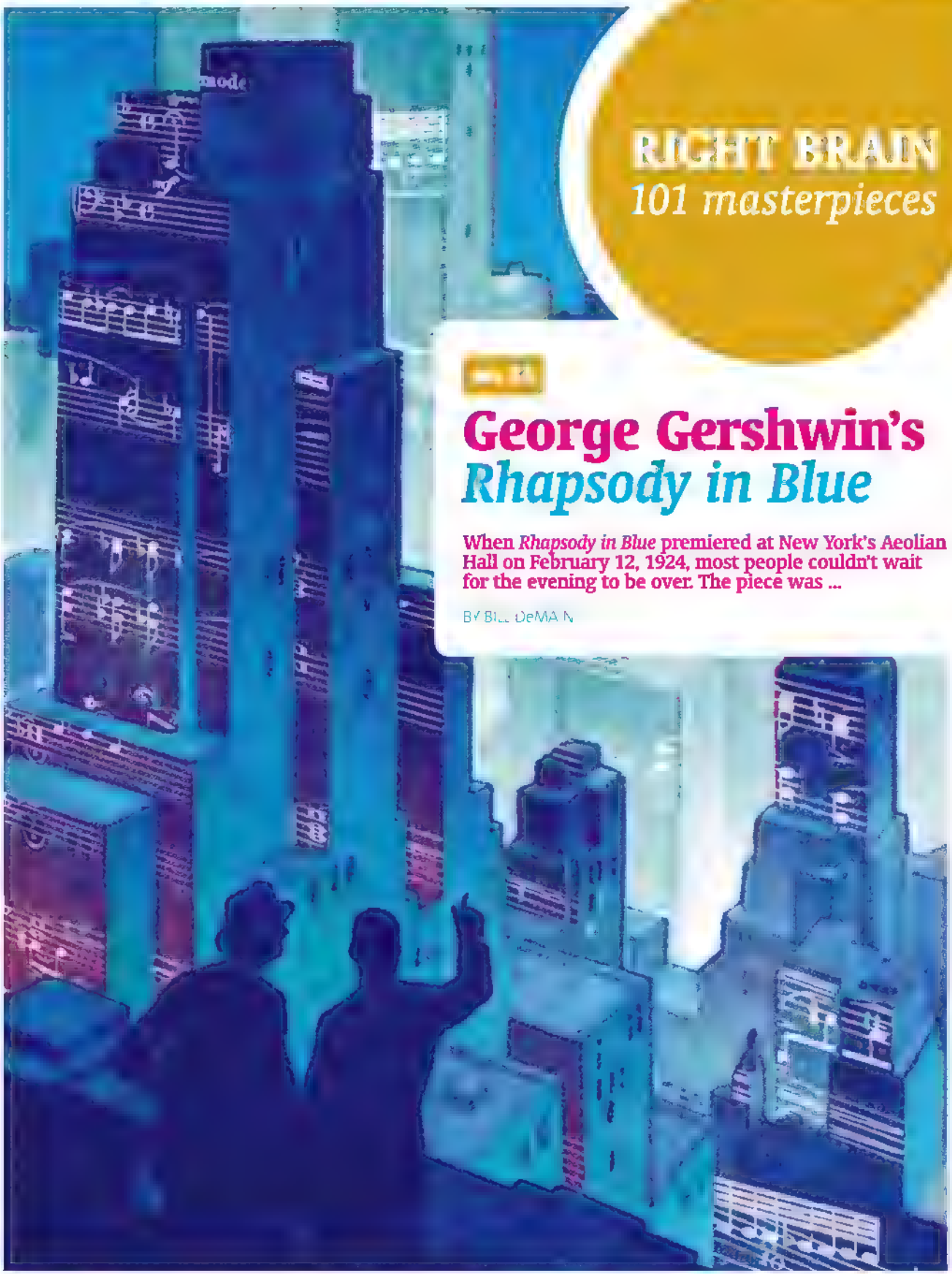
"mental_floss cleans out the cobwebs" – Chicago Tribune

"Got a big cocktail party coming up? Read *mental_floss* first." – Online Editor

"A delightfully eccentric and eclectic magazine" – The Washington Post

Go to www.mentalfloss.com/subscribe or call 440.729.7774

::feel smart again::
mental_floss



RIGHT BRAIN
101 masterpieces

George Gershwin's *Rhapsody in Blue*

When *Rhapsody in Blue* premiered at New York's Aeolian Hall on February 12, 1924, most people couldn't wait for the evening to be over. The piece was ...

BY BILL DEMAIN

... scheduled near the end of a long program called "An Experiment in Modern Music." After two sluggish hours, the audience was bored, restless, and drenched in sweat due to the hall's broken ventilation system. But then, a lone clarinet pierced through the orchestra, fizzing upward like a fountain of Champagne. Suddenly, everyone was riveted.

For the next 17 minutes, George Gershwin, an unknown 26-year-old composer, caressed and pounded the piano at center stage, chasing the orchestra through a thrill ride of skyrocketing notes. It was an unforgettable debut—one that brought new respect to jazz and helped redefine classical music. Today, *Rhapsody in Blue* is one of the 10 most-performed works of the 20th century, right up there with "Happy Birthday" and "White Christmas."

Gershwin wanted the rhapsody to seem emotional and spontaneous. He even included a blank page in the score that simply said, "*Piano Solo: Wait for Nod.*"

FROM BROOKLYN TO BROADWAY

When George Gershwin was 11, he overheard a friend playing Antonín Dvořák's *Humoresque No. 7* on the violin. The music provoked "a flashing revelation" that hooked Gershwin immediately. He began sneaking over to a neighbor's house in Brooklyn to teach himself how to play different instruments. A year later, when George's mother brought home a secondhand upright piano, the family was stunned to see George sit down and tear through vaudeville tunes. From then on, he was glued to the ivories. A few years of formal lessons followed, but his teachers could barely keep up with Gershwin's prodigious talent.

At 15, Gershwin quit school and took a job as a song plugger in Tin Pan Alley, New York's music-publishing district. Song pluggers were basically pianists who sold sheet music by demonstrating the latest tunes for singers, dancers, and producers. With his outgoing personality, Gershwin was a natural, often weaving in his own musical ideas to liven up the pieces. Before long, he became a full-time songwriter. When he was 21, he penned his first hit, "Swanee," made famous by blackface entertainer Al Jolson. The 1920s equivalent of a Beyoncé single, "Swanee" spent nine weeks at No. 1, selling 1 million copies of sheet music and 2 million records. Soon, Broadway came calling, and George became, in his own modest words, "a fairly busy young composer."

AN EXPERIMENT IN MODERN MUSIC

As Gershwin was blossoming, a bandleader named Paul Whiteman took notice of his talent. In the early 1920s, Whiteman had been instrumental in getting white audiences to pay attention to "black" music. But in 1924, he had a new idea: Whiteman wanted to introduce symphony audiences to jazz. He invited Gershwin—along with better-known composers Irving Berlin and Victor Herbert—to write pieces that combined jazz with classical melodies, hoping to present it all in one fantastic concert called "An Experiment in Modern Music."

Gershwin agreed to write a concerto for Whiteman's "Experiment," but five weeks before the scheduled performance, he had nothing. He'd been busy working on a Broadway show and hadn't had time to put his ideas together. He called Whiteman to bow out, but the bandleader refused to let him off the hook. He persuaded the young talent to stay in the program and

motivated him to get to work. Reluctantly, Gershwin agreed to compose a rhapsody—a free-form orchestral piece with just a hint of bluesy improvisation.

With the clock ticking, Gershwin began squeezing in writing sessions between rehearsals for his Broadway show and scribbling notes in the back of taxis. Three weeks before the performance, during a rail trip from New York to Boston, the whole piece came together. Inspired by the "steely rhythms" and "rattley-bang" of the train, Gershwin finished the piece in a fury of inspiration.

Gershwin wanted the rhapsody to seem emotional and spontaneous. He even included a blank page in the score that simply said, "Piano Solo: Wait for Nod." That sort of breathing room for free expression was rare in the structured world of classical music. In fact, on the night of the premiere, Gershwin improvised the solo on the spot. Even today, the ad-libbed section remains in the score, meaning that no two performances of *Rhapsody in Blue* are ever the same.

A few weeks after its debut, Gershwin reprised *Rhapsody in Blue* at Carnegie Hall. Although audiences adored it, critics complained that it was too "formless" to be called classical and too "rigid" for jazz. Still, Gershwin toured the country performing *Rhapsody*, and by year's end, it had become a kind of unofficial national anthem, embodying all the fun and swagger of the Roaring '20s.

LEGACY IN BLUE

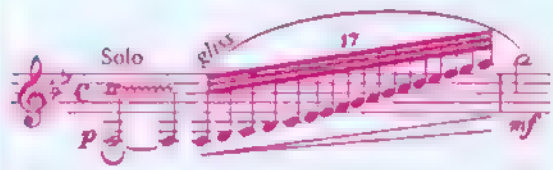
Since 1924, there have been more than 75 recordings of *Rhapsody in Blue*, including acclaimed renditions by conductor Leonard Bernstein and composer Duke Ellington. The music has inspired film composers such as John Williams and Randy Newman, as well as rock bands ranging from The Beach Boys to Phish. In fact, as one of the first crossover symphonic pieces, *Rhapsody in Blue* helped to create the pop concert, in which orchestras play a mix of popular tunes and classical works.

For Gershwin, *Rhapsody* was only a stepping stone in his career. Until his death from brain cancer in 1937, he enjoyed nearly constant success. Gershwin's 1928 *An American in Paris* became a standard with American and European symphonies, and his revolutionary 1935 African-American "folk opera," *Porgy and Bess*, gave us such classics as "It Ain't Necessarily So" and "Summertime." He even became the first American-born composer to appear on the cover of *Time* magazine. But despite all of his successes, *Rhapsody in Blue* remains Gershwin's crowning achievement, the moment when he captured the spirit of a modern nation.

RHAPSODY IN BLUE: A Listener's Guide

THE NOTE HEARD 'ROUND THE WORLD

The opening phrase of *Rhapsody in Blue* may be the most recognizable 17 notes in American music. A clarinet trills, gliding upwards in a dizzy arc, then falls in two swaggering notes. The original clarinetist, Ross Gorman, decided to make the phrase "smear," running the notes together in one continuous swoop. Gershwin loved the effect so much that he added it into the score.



WHAT'S IN A NAME?

Originally titled *American Rhapsody*, George's lyricist brother, Ira, suggested renaming the piece to include color, like James Whistler had done with paintings such as "Arrangement in Grey and Black" (better known as "Whistler's Mother"). Ira and George both felt that the new title better captured the bluesy feeling of the piece.

COME FLY THE FRIENDLY SKIES

Halfway through *Rhapsody*, the piece shifts into a dreamy, romantic mood that was once called "a swollen hymn to Eros." This section, known as the "andantino moderato," is one of the most-referenced themes in popular music, appearing in everything from Woody Allen's *Manhattan* to a series of United Airlines TV commercials.

THE LONE ARRANGER

The version of *Rhapsody in Blue* that we know today is not quite the same as the one that premiered in 1924. Originally, composer Ferde Grofé arranged Gershwin's score for a small orchestra of only 21 musicians. But through the years, Grofé grew to love *Rhapsody* so much that he kept expanding its orchestration, adding instruments to capture its full grandeur.

THE SHOW MAY GO ON

In 2009, Gershwin's estate gave some of the composer's unfinished songs to Brian Wilson, the musical genius behind The Beach Boys. Wilson plans to finish writing the songs and release them later this year.

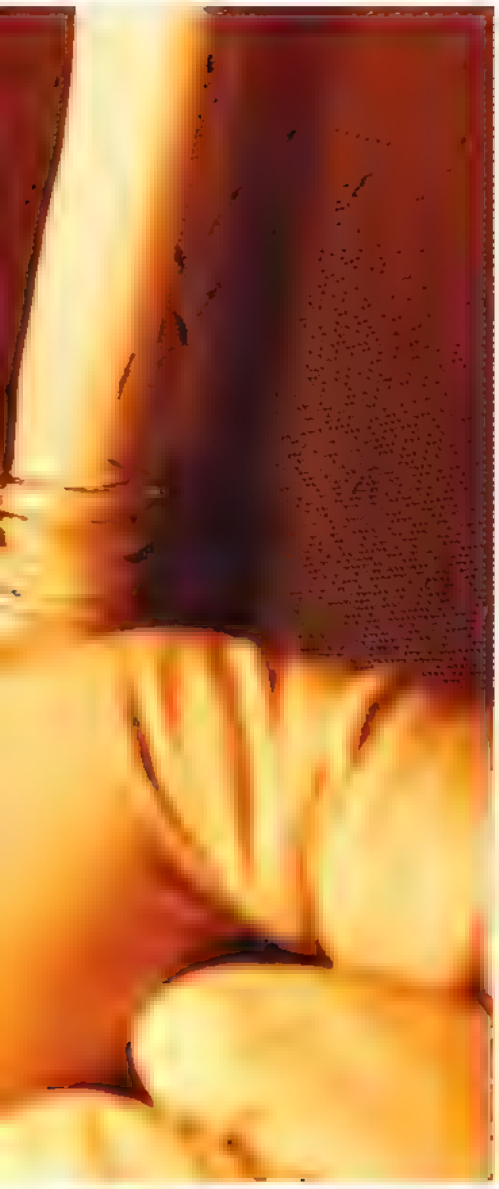
MORE music explained at mentalfloss.com/more:
- The Genius of Miles Davis
- Pop Songs That Rip Off Classical Music

The Quest for a Malaria Vaccine

and the Man Who Risked Everything to Find It

Dr. Stephen Hoffman learned about malaria the hard way—by rolling up his sleeves and letting thousands of infected mosquitoes bite him

BY MARY CARMICHAEL



Dr. Stephen Hoffman

Malaria is the biggest killer in human history. It's taken the lives of *half* the people who've ever walked the Earth. Even with modern drugs, 10 to 30 percent of those who contract the disease die. Needless to say, it's not the sort of thing you want to expose yourself to, unless you have a very good reason. Stephen Hoffman had a very good reason.

Back in mid-1990s, the biologist rolled up his shirtsleeve and dipped his arm into a swarm of malaria-infected mosquitoes. But he didn't expect to get sick. At the time, he thought he'd invented a vaccine that would keep him disease free. He was wrong. After Hoffman came down with a fever and the chills, he knew it was time to start over.

Today, in an unassuming Maryland office park, Hoffman and his team are breeding malaria parasites, dissecting mosquito spit glands, and working on a vaccine that might be the biggest boon to public health ever invented.

A STICKY SITUATION

To understand how Hoffman's newest vaccine works, you have to understand the malaria parasite. The story begins in the salivary glands of the *Anopheles* mosquito, where the parasite is born. It lingers there until dusk, when the mosquito goes out to feast. As a mosquito "bites" a human host, it spits on the skin, transmitting thousands of parasites from its salivary glands into the human's bloodstream. From there, the parasite rides the blood vessels down to the liver, squirms into a liver cell, and then spends the next week maturing into an adult. All the while, the human victim has no idea what's happening. There aren't any symptoms until the end of the week, when as many as 1 million mature parasites will burst out of the liver and invade the body's red blood cells, making the host utterly miserable.

At this point, malaria parasites wreak havoc on the body by making blood cells sticky. Cells begin clinging to the walls of the blood vessels, clogging up the flow of oxygen to the brain, kidneys, and other vital organs. For most patients, the effects feel like a really bad case of the flu—fever, chills, headache, muscle pain. But for a few unfortunate victims, things get worse. Those who contract "cerebral malaria" become confused and lethargic, and they run the risk of delirium and seizures.

These days, doctors rely on two main tools for dealing with malaria. The first are insecticide-treated mosquito nets that hang over beds. These nets are so potent that they can kill most mosquitoes on contact. But they're also expensive to distribute, and they can wear out after a few months of use. Plus, the nets don't always stay where they're supposed to be; villagers often repurpose them as fishing nets, bridal veils, or whatever else they need.

Instead of maturing and mutating, the malaria parasites get permanently stuck in adolescence. Then the host's body has enough time to respond.

The other tool is drugs, but those have their problems, too. The standard treatment for malaria is chloroquinine, a chemical related to the quinine in tonic water. Unfortunately, parasites in most malaria-infested areas have developed a resistance to it. The same is becoming true for artemisinin, an anti-malarial drug based on a 2,000-year-old Chinese herbal remedy. Malaria parasites in Cambodia have already become resistant to it. The frustrating truth is that malaria is a clever, adaptive parasite that will probably evolve its way around any drug that's meant to cure the disease. That's why the world needs a vaccine.

Creating that vaccine is one of the biggest challenges in modern medicine. Scientists

have never developed a vaccine against a human parasite. Not only that, but malaria is also particularly devious. At each stage of its life cycle, it changes so dramatically that the human immune system barely has time to recognize it. It's as if malaria keeps slipping into different disguises, continually fooling the body's attack response. The issue is further complicated by the size of the parasite. It's big—at least compared to other pathogens. Unlike viruses, which can have as few as three genes, malaria has 5,000, and many of those are constantly mutating.

So how do you attack this swirl of moving targets? Stephen Hoffman thinks he's found an answer. His new vaccine is based on an odd phenomenon that was discovered in the early 1970s. Researchers found that if you damage the malaria parasite's DNA by exposing it to radiation, and then allow yourself to be bitten by more than 1,000 mosquitoes infected with the damaged parasites, you'll become immune to the disease. The result is that the weakened parasites hit a snag in their development as they enter your bloodstream. Instead of maturing and mutating, they get permanently stuck in adolescence. And because they can't grow or evolve, the host's body has enough time to produce an effective immune response. Hoffman's research found that more than 90 percent of people exposed to malaria this way became immune. But, as he puts it, "Obviously, you can't immunize everyone by having them get bitten 1,000 times."

These days, Hoffman is busy trying to create a marketable vaccine that mimics all those bites. His company is called Sanaria—Italian for "healthy air." (It's the opposite of malaria, which means "bad air.") But standing outside the organization's nondescript office, you'd never guess what outlandish things are going on within. Sanaria's researchers purposely infect mosquitoes with the malaria parasite and zap them with radiation. Then, the mosquitoes are brought into a sterile room where six people in gowns and gloves sit and extract the pests' salivary glands. (There's a flyswatter nearby, in case a mosquito tries to escape.) It's delicate work, but a typical Sanaria employee can dissect 100 mosquitoes in just one hour. Finally, the excised salivary glands are all crushed up and put into a test tube until they're ready to be injected into human test subjects.

At the Sanaria lab in Maryland, researchers spend their days extracting mosquitoes' salivary glands. It's delicate work, but a typical Sanaria employee can dissect 100 mosquitoes in just one hour.

Hoffman started FDA-approved, Phase I clinical trials in 2009, and today, more than 80 adult volunteers in Maryland have been immunized. (Many of them are soldiers, since the military has a special interest in arming ranks against malaria.) If Hoffman's formulation passes the trial, he'll move on to Africa to perform a similar study.

Meanwhile, other researchers are also making headway on the malaria vaccine. GlaxoSmithKline, for instance, has a 50-percent effective vaccine already in Phase III trials in Africa. Of course, whoever develops the best vaccine will still have to figure out how to get it to those most at risk—populations living in developing countries that can't afford high-priced medicine.

But Hoffman and other researchers aren't easily deterred. The malaria parasite will kill 1 million people this year. If it isn't giving up, then neither will they.

MORE
6 Horrifying Parasites
A Fascinating Look at 20th Century Pandemics
+MORE Science at mentalfloss.com/more

TAKE THE EDGE OFF.

LEARN TO BE WELL ROUNDED.

CASE WESTERN RESERVE UNIVERSITY

CASE.EDU/ARTSCI

BOSTON TECH PARTY

The Wonders of the MIT Media Lab

By Linda Rodriguez McRobbie

MIT's Media Lab building, designed by Fumihiko Maki

WANT TO KNOW WHO TO THANK FOR GUITAR HERO AND THE KINDLE? YOU'LL NEED TO HEAD TO BOSTON, WHERE A NEW AMERICAN REVOLUTION IS TAKING PLACE.

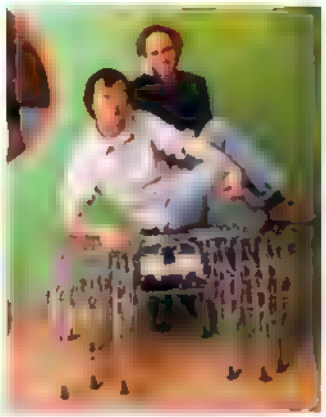
The Media Lab at the Massachusetts Institute of Technology (MIT) is the kind of place that makes you think the future might not be so scary after all. Instead of being a wasteland overrun by machines hell-bent on human destruction, the students here are encouraged to build the kind of future they want to see. And that's more likely to mean a world full of *Star Trek* gadgets and friendly robots that want to make you a cup of fair-trade coffee.

The Media Lab is an elite graduate program at MIT, and since it opened in 1985, it's been changing the way people interact with machines. Innovators here were tinkering with social networking long before Facebook, and they thought up motion-capture filming well before Gollum was creeping around in Peter Jackson's *The Lord of the Rings*. Without the Media Lab, Guitar Hero wouldn't exist, and neither would the Kindle. The idea that every child in the world should have a laptop—the One Laptop Per Child initiative—well, that was born in the Media Lab, too. Right now, the Lab is filled with fur-covered robots and jumbles of electronics, all of which have an impressive chance of becoming the next big thing.

IN THE BEGINNING...

The Media Lab was dreamt up in the 1980s by two MIT professors, Jerome Wiesner and Nicholas Negroponte. After World War II, Wiesner worked at Los Alamos in New Mexico, where he helped the United States military build nuclear weapons. He walked away from the experience committed to the idea that technology needed to be used to build a better future, not a more terrifying one. He went on to become President Kennedy's science advisor, during which time he helped Rachel Carson prove that DDT was damaging to the environment. In 1971, Wiesner became MIT's president. The Lab's other founder, Nicholas Negroponte, studied at MIT, where he was one of the first people to focus on computer-aided architectural design. He joined the faculty in 1967, at just 23 years old, and immediately went to work creating a think-tank to study how people interact with computers.

In 1985, Wiesner and Negroponte joined forces to create the Media Lab, a kind of play space for talented people of all disciplines—arts,



ABOVE: Tod Machover and Wei Dong of the Hyperinstruments lab with Music Robot, TOP AND LEFT: playing Guitar Hero.

sciences, computer technology, engineering, architecture, and urban planning. The hope was to solve the world's needs by bringing together people with unique backgrounds. For its launch, the duo managed to secure more than $45 million in funding. (It was enough money to lure architect I.M. Pei, the guy who built the giant pyramid at the Louvre, to design the Lab's first headquarters.) Next, they concentrated on recruiting misfits, people who didn't seem to belong within the rigid confines of academia; Negroponte called it a "salon des refuses."

One of these misfits was Tod Machover, a Juilliard-trained composer with a deep interest in computers. In 1985, he started a lab within the Media Lab called Hyperinstruments. Machover's goal was to create new technology that could turn music into "as positive and creative a part of people's lives as possible." Within a few years, he'd already seen tangible results. His lab had built a fleet of musical robots and created new interactive instruments for performers as varied as Penn & Teller, Yo-Yo Ma, and Peter Gabriel. They'd also produced groundbreaking software called Hyperscore, which allowed children to create original music without any prior musical training.

Most remarkably, Machover's lab gave rise to Guitar Hero, a series of musical video games that have grossed more than $2 billion worldwide and have led to a whole new genre of rhythm-based games. It all started in the 1990s, when researchers Alex Rigopulos and Eran Egozy were working in Machover's lab and built a computer program that allowed users to improvise pop-music solos

MAINSTREAM MEDIA

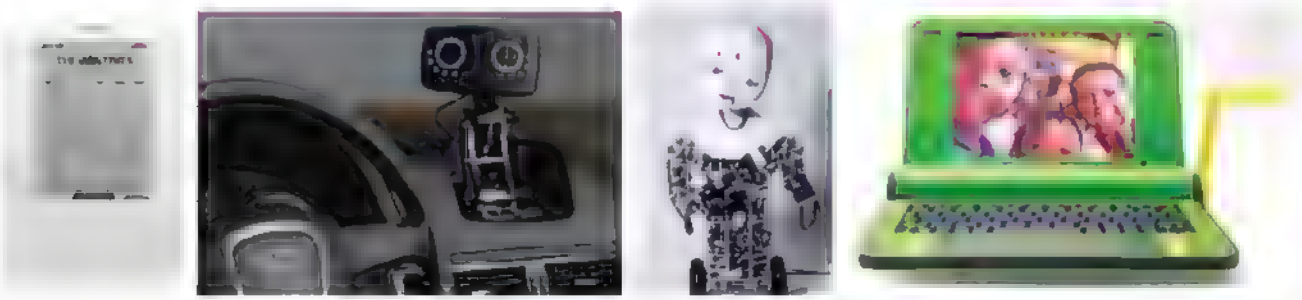
The MIT Media Lab has long been at the forefront of technological innovation, dreaming up stuff that now seems kind of commonplace. Here are a few examples:

LEGO MANIA: The coolest educational toy of the past decade was LEGO MindStorms—a construction kit that lets children build real robots out of computerized LEGOs. The system is based on the programmable brick, which was developed at the Media Lab's Lifelong Kindergarten center in the 1990s.

DRAWING FROM LIFE: The distinct look of the animation featured in *A Scanner Darkly* *Waking Life*, and those Charles Schwab commercials is the work of a software company called Flat Black Films, which was founded by Bob Sabiston. He's yet another guy who got his start at the Media Lab. Sabiston's technology takes live-action film and transmutes it into cool, dreamy animation.

A BULLET TO THE HEAD: Ever wonder how shows like *CSI* can get a camera to follow a speeding bullet through someone's aorta? The guys at GenArts, Inc. are behind that gruesome special effect. In addition to being a Media Lab spin-off, GenArts is also one of the TV and film industry's primary developers of visual-effects software. Its programs can be seen in everything from Sprite commercials to the latest *Star Trek* film.

THE MEDIA LAB STRIVES TO COME UP WITH WHAT NEGROPONTE CALLS "PRE-COMPETITIVE IDEAS," VISIONS THAT ARE 10 OR 15 YEARS AHEAD OF THEIR TIME.



Born at the Media Lab (FROM LEFT): Amazon Kindle, AIDA (Affective Intelligent Driving Agent), MDS (Mobile Dexterous Social) Robot, XO laptop for the One Laptop Per Child initiative

with joysticks. After they graduated from the Media Lab, they created Harmonix in 1995, the software company behind Guitar Hero and Rock Band. The games utilize the same basic computer programs they invented under Machover, but instead of improvising, players try to follow music as closely as possible in the context of a game. In addition to making Rigopulos and Egozy rich (MTV Networks bought Harmonix for $175 million in 2006), both Guitar Hero and Rock Band fulfill Machover's promise of making music fun and accessible for everyone

MONEY, MONEY, MONEY

The road Harmonix took from student experiment to commercial success fulfilled another promise: to make money. From the outset, the Media Lab was structured to generate its own funding. Basically, it was a start-up before anyone had heard of start-ups. Instead of relying on MIT's sizable endowment, the Lab received the majority of its funding from big companies. Today, that's still how it works. Corporate sponsors such as Best Buy, Samsung, Bank of America, and PepsiCo., don't get to dictate how research is conducted at the lab, but in exchange for their donations, they receive intellectual-property rights to any gizmos created there. This has the added bonus of putting pressure on faculty members and students to design and build technology that's relevant to the real world. Several times a year, students are called upon to present their work to their sponsors. And these presentations often lead to projects that go straight from classroom to boardroom.

One of the biggest ideas to come out of this model has been electronic ink, better known as E ink. At the time of its development in the late 1990s, 75 MediaLab sponsor companies backed the E ink project, which was referred to as "the last book." E ink technology is pretty fascinating. A page is embedded with black and white microcapsule spheres, and when an electronic charge is applied to the page, the spheres move to the surface, forming letters. Today, E ink is commonly used in many e-readers, including the Barnes & Noble Nook and the Amazon Kindle. As of 2009, 1.5 million Kindles have been sold worldwide, and the next generation of e-readers—which hope to do for newspapers and magazines what the first generation did for books—is already on its way to market.

GOLDEN LABS

Guitar Hero and E ink are just two of the many incredible inventions to come out the Media Lab. But the Lab does more than just produce cool gadgets; it's also about nurturing creativity and bringing people together to benefit humanity. In 2005, Negroponte left the Lab to launch the One Laptop Per Child initiative, a nonprofit organization devoted to putting laptops in the hands of impoverished children across the world—children who, in most cases, can barely afford books. Small and durable, the XO laptops run on hand-crank power and have special screens that are visible in direct sunlight, for children who go to school outdoors. Thanks to the program, nearly 2 million kids in countries from Haiti to Afghanistan now have computers.

During the past 25 years, the Media Lab has seen its share of imitators. On the West Coast, there's the California Institute for Telecommunications and Information Technology, or Calit2, a research consortium run jointly by UC Berkeley and UC San Diego. Founded in 2000, Calit2 runs along similar rails as the Media Lab. It pursues innovation through interdisciplinary cooperation, always with an eye toward product development. And it, too, has developed a number of headline-grabbing inventions, including the Einstein Robot, a hyperrealistic automaton that can respond to and mimic human emotions.

Calit2 and other research institutions are putting pressure on the Media Lab to stay in the game. In response, the Media Lab strives to come up with what Negroponte calls "pre-competitive ideas," visions that are 10 or 15 years ahead of their time. Under Frank Moss, the Lab's current director, the program has sharpened its focus to deal with major social issues, such as poverty and disease. It's also building new communication tools to help people with autism, and it's creating new social-networking devices to aid in healthcare.

Of course, while the students and faculty inside the Lab are always looking ahead, the Lab's exterior has been stuck in the past. That is, until recently. In 2007, the grad program hired award-winning architect Fumihiko Maki to design its current headquarters—a stunning structure of metal and glass that looks and feels like it comes from a better world. Today, the MIT Media Lab is everything you'd expect from a birthplace for innovation. The building's giant windows make it easy for anyone to look inside and sneak a peek into the future.

WELCOME TO THE FUTURE!

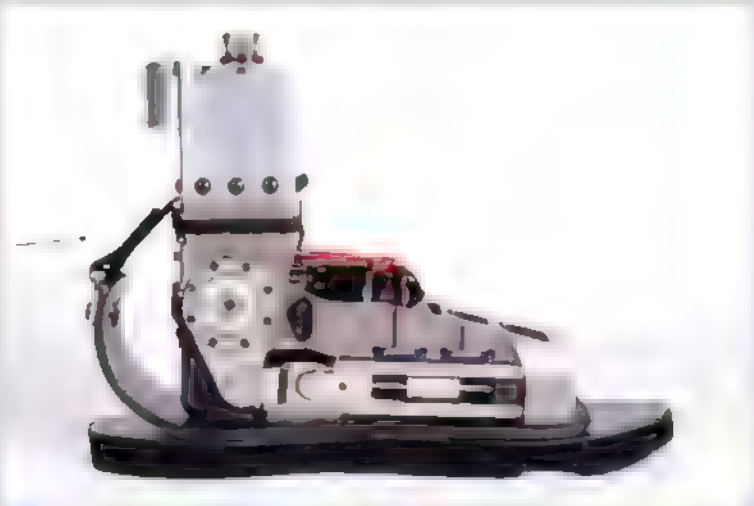
The Media Lab is always coming out with nifty ideas that are going to revolutionize the way the world works. What's it seeing in our future now?

ROBOT SKIN

The Media Lab is currently working with an engineering group in Britain to build "skin" for robots. The new exterior would allow robots to sense when they've been touched and determine the pressure of the contact. The idea is to build machines that can interact with humans on a whole new level.

A PERSONAL FOOD FACTORY

This device is something that *Star Trek* fans have been anticipating ever since Captain Picard said, "Tea, Earl Grey, hot." It's a computerized food processor that will make entire meals by blending together your favorite ingredients and then "printing them out." Developed by the Fluid Interfaces Group at the Media Lab, the device isn't ready yet, but it could be soon.



BETTER ANKLES

Researchers at the Media Lab are currently pioneering "smart" prostheses that mimic the body's natural motion. In 2007, researchers in the biomechatronics lab unveiled the world's first robotic ankle, now being commercialized and brought to amputees the world over. The new robotic ankle employs an electric motor and tendon-like springs, which resemble the body's natural architecture, thus minimizing fatigue and improving balance. And it really works! The biophysicist leading the research, Dr. Hugh Herr, has been a double amputee since the age of 17. He proudly, and successfully, tested the new motorized ankle on himself.

A SIXTH SENSE

Who says computers need to be tied to a monitor and keyboard? That's so last decade. SixthSense is a small interface that will allow computers to read your hand gestures and arm movements. For example, if you draw the @ symbol into the air, SixthSense will tell the computer to open your email. The device works by projecting digital information into the three-dimensional world and then receiving digital information back. In other words, it turns your room into a giant computer. The coolest part? The prototype only cost $350 to build.

THE MOST INTERESTING PLACES IN THE SPACE-TIME CONTINUUM

By Jennifer Drapkin
and Ethan Trex

The World's Most Inconvenient Destination Wedding Spot

On May 29, 1953, Edmund Hillary and Tenzing Norgay became the first people to reach the top of Mount Everest, 29,028 feet above sea level. Since then, getting to the highest point on Earth has become less of a big deal. More than 4,000 people have done it, including a 13-year-old boy, a 75-year-old grandfather, a blind man, and a double amputee. But on May 30, 2005, a Nepalese couple, Mona Mulepati and Pem Dorje Sherpa, upped the ante and got married there. Like most newlyweds, they were on top of the world.

2 The Day a Caveman, or Cavewoman, Invented Fire

About 1.8 million years ago, one of our ancestors learned to build a fire. And chances are, the first thing that early humans did with it was cook. According to Harvard University's Richard Wrangham, this changed the fate of the species. Heating food makes it easier to digest, which lets you get more out of every calorie you consume. For cavemen, this translated into less time spent hunting and chewing, and more time for developing tools, socializing, and eventually making cave paintings. In fact, shortly after our ancestors began cooking, their digestive tracts got smaller and their brains got bigger, meaning fire was literally food for thought.

Inside a Barrel with Harry Houdini

Magic tricks may not require supernatural abilities, but they are difficult to pull off. Harry Houdini, for instance, used a unique combination of strength, stealth, and carpentry to perform his signature trick—escaping from a sealed barrel. In *Houdini on Magic*, the magician revealed that before he was locked inside a barrel, he would sneak in a tiny lamp and several small saws. Once the barrel was shut, his assistants would place it behind a curtain while Houdini gradually sawed his way to freedom. He'd then reseal the barrel from the outside. All the while, an orchestra played loudly to cover up the noise of his handiwork. If Houdini didn't feel like sawing, he'd just sneak a jack into the barrel and use his powerful muscles to pop off the lid. He'd then use a muffled hammer to rebuild the shattered barrel.

Houdini's other escape acts employed similar strategies. If he was being shackled and tied into a sealed box while wearing nothing but his skivvies, he would hide a small lock-pick in his armpit or under the sole of his foot. In other cases, he would rig safes with trick locks that he could pop open using magnets. These escapes weren't technically magical, but they weren't easy, either. As Houdini wrote of the barrel trick, "This gag takes a lot of work."

4 The Prettiest Slums of Toronto

Dutch artists Jeroen Koolhaas and Dre Urhahn are bringing vibrant art to unexpected places with their Favela Painting project. About one-third of Rio de Janeiro's population lives in *favelas*, urban slums overrun with gangs and drugs. To prevent kids from getting caught up in the drug trade, the Favela Painting project pays Brazil's youth to create murals for their communities. As a result, armies of teenage artists are giving their neighborhoods new faces—ones covered in bright, cheerful colors. The hope is that within the next few years, the entire landscape of favelas will become a massive work of art, drawing attention to the needs of the poor and filling the community with pride.

5

A Garbage Heap that's Out of this World

We all know that astronauts have left flags and golf balls on the Moon. But that's just the tip of it. The Moon is actually the biggest landfill in space, housing tons and tons of human garbage. Here's why: When astronauts visit, they have to bring back rocks, soil, and other samples. To free up weight for the trips home, they often abandon items they don't need anymore, such as tools, empty food containers, cameras, and clothing. In 1969, *Apollo* 11 astronauts left behind nearly 5,000 lbs of stuff, including Buzz Aldrin's and Neil Armstrong's boots! Similarly, *Apollo* missions 15, 16, and 17 ditched their moon buggies, meaning three slowly decaying cars are still parked on the Moon.

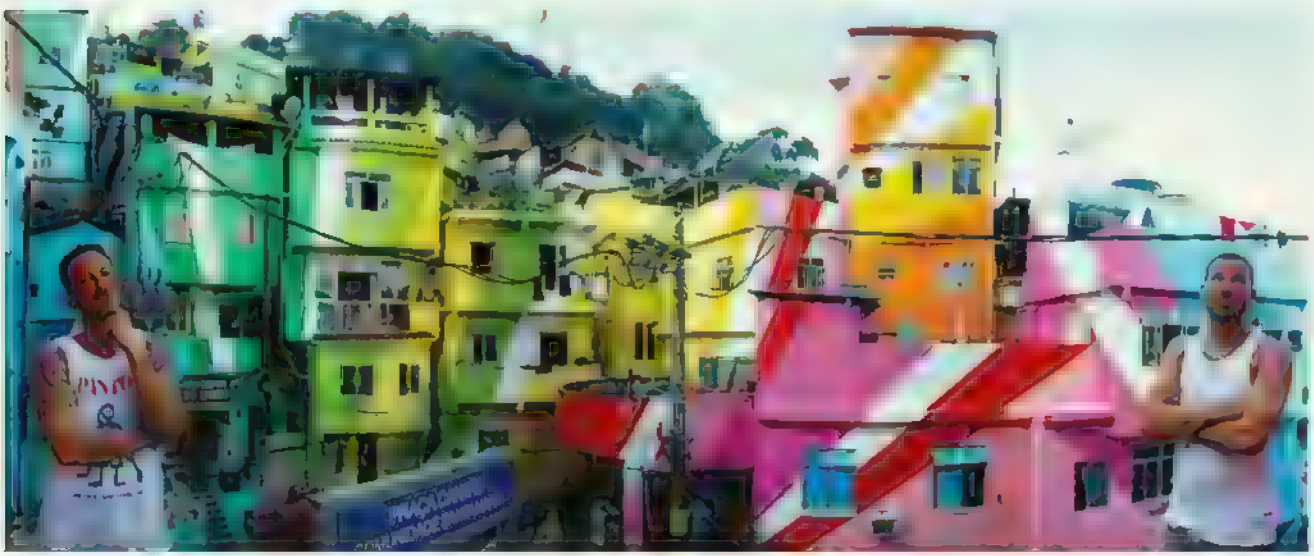
But one man's space trash is another man's treasure. In early 2010, California's State Historical Commission voted to preserve dozens of pieces of garbage left by *Apollo* astronauts, including urine collection devices and air sickness bags. The department feels that the relics are representative of the contributions that Californians, and California companies, have made to space exploration. If everything goes according to plan, the Moon garbage will remain untouched—in one giant heap for mankind.

The Mayor's Office in the World's Smallest Town

People driving by the town of Monowi, Nebraska, must think the population sign is exaggerated. It reads, "Monowi: 2." In fact, the sign is substantially off, overestimating the town's population by a full 100 percent. That's because Monowi has only one resident, 76-year-old Elsie Eiler, who functions as the mayor, librarian, and bartender.

The town wasn't always so tiny. When Elsie was a girl in the 1930s, Monowi was a prosperous railroad stop with about 150 residents. All of them eventually moved or died, except for Elsie and her husband, Rudy. When Rudy passed away in 2004, Elsie turned his 5,000-book collection into a lending library, which she runs along with the Monowi Tavern, a bar that offers beer and burgers to visitors from neighboring counties.

As Monowi's mayor, Elsie dutifully collects taxes from herself, and each year, she applies for state funding to keep the town's four streetlamps burning. She also complies with state laws that require her to post notices for upcoming public hearings. It's something of a thankless task, though; by law, only citizens of Monowi are allowed to attend.



7. Throwing Knives with Al Gore and Tommy Lee Jones

Long before they won Oscars and Nobel Prizes, actor Tommy Lee Jones and former Vice President Al Gore were roommates at Harvard in the 1960s. For fun, they'd compete with each other in knife-throwing contests, aiming at trees in Harvard Yard. (Eventually, they had to stop because they were doing so much damage to the elms.) The duo also tried to pick up girls together by serenading them with country tunes. When that didn't work, Jones and Gore would sit around their dorm room and watch *Star Trek*. At the 2000 Democratic National Convention, Jones said, "I will tell you that Al's the closest thing I've had to a brother." Just like Kirk and Spock.

9, 10. The Spray-Can Aisle at Home Depot in 2025

Your Sunday afternoon trip to Home Depot will be a lot more exciting in 15 years. For example, if putting solar panels on your roof feels like too much of a hassle, just pick up some **(9)** spray-on, solar-power paint. Already in trials, the quick-drying paint uses a titanium pigment that's extremely sensitive to sunlight, allowing it to harness energy that can be pumped right into your house.

While you're there, why not pick up some **(10)** liquid glass? Developed by scientists in Turkey, the spray can be used to coat any surface with an ultra-thin layer of silicon dioxide. Not only does it guard against bacteria and keep surfaces sterile for months, but it also blocks out heat, UV light, and acids. Once you spray liquid glass on something, cleaning requires nothing more than a quick rinse with warm water.

8

For fun, they'd compete with each other in knife-throwing contests, aiming at trees in Harvard Yard.

The First Time a Goat Taught a Man to Perform Surgery

Back in the 1st century CE, a Roman doctor named Aulus Cornelius Celsus made history when he successfully performed the first cataract surgery. Reportedly, he got the idea for the operation from a goat. Months earlier, he watched a blind goat walk into a thorn and scratch its eye. Once the goat's eye healed, the animal could see again.

Inside Warren Buffett's Mind

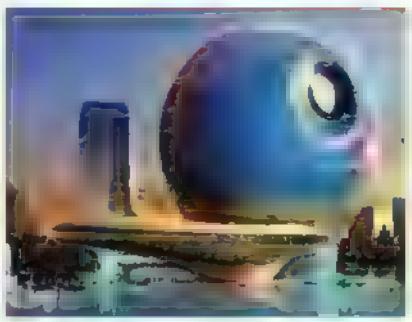
During the course of his storied investment career, Warren Buffett has amassed a net worth of more than $45 billion. So, we thought it'd be a good idea to take a sneak peek inside his brain. What's Buffett's trick? Apparently, he doesn't have one. Buffett simply looks for businesses he thinks will succeed in the long run and then snaps them up at fair prices. In fact, he never buys properties just to flip them for a quick profit. As he once told his shareholders, "Our favorite holding period is forever."

This philosophy has led to a wildly diversified portfolio that includes companies from Fruit of the Loom to GEICO. It's also protected Buffett from several financial crises. During the 1990s tech boom, when most investors loaded up on surging dot-com stocks, Buffett continued to invest in more traditional companies—partly because he didn't understand what many of the tech companies were doing. As it turns out, they didn't know what they were doing, either. When the bubble burst, the "Oracle of Omaha" emerged relatively unscathed.

Buffett's down-to-earth values apply to his home life, too. The multibillionaire still lives in the same house he bought in 1958 for $31,500. He's also a frugal father. Buffett's son Peter hasn't received a dime of the family fortune since he turned 19—even during tight financial times, when he had to take out a second mortgage on his house.

12

The Final Resting Place of the Russian Mafia



13. The Hotel Full Moon in Baku, Azerbaijan

If the blueprints are accurate, the Hotel Full Moon in Baku, Azerbaijan, will be the scariest-looking building in the universe. When (and if) it's finished, it'll look like the Death Star giving you the Evil Eye.

Inside a Tornado

Meteorologists spent decades trying to get a good look inside tornados, but in 2004, someone finally succeeded. In June of that year, storm chaser Tim Samaras managed to place a video probe in the path of an Iowa funnel cloud.

So, what's it like inside? Imagine sitting in a jet engine and being pelted with rocks. Samaras' probe captured the swirling clouds of dust and debris at the tornado's base, as well as the thunderous noise that goes along with it. There's also a surprising amount of water, because the low pressure that forms the funnel cloud makes water vapor condense.

With winds that can exceed 200 mph, almost anything can get sucked into one. (Cars have been known to get tossed hundreds of yards.) But getting stuck in a tornado can also mean being bombarded with feathers. As it turns out, twisters are especially rough on chickens. When a tornado rips through coops and barnyards, terrified chickens will rapidly molt their feathers in order to escape the dangerous winds, leaving a lot of naked birds in the wake of a storm.

15 At the Coldest Place on Earth ...

On July 21, 1983, Russian scientists at the Vostok Station in Antarctica witnessed the coldest temperature in recorded history: 128°F below zero. That's pretty extreme, but it's nothing compared to what the scientists are researching below their feet right now.

16 ...and the Most Alien Environment on Earth

Sitting beneath Vostok Station is Lake Vostok, a subglacial lake buried about 13,000 feet below the Antarctic ice sheet. The sheer weight of all that ice supersaturates the water in the lake with oxygen, making its oxygen level 50 times greater than ordinary freshwater lakes. What's that got to do with outer space? The extreme environment is so similar to Jupiter's moon Europa that if researchers discover life in Lake Vostok, they're pretty sure they'll find it on Europa, as well.

17

The Hottest Place on Earth

18. Rocking the Cradle of Civilization

Want to head back to the early days of civilization? Then get ready to visit Iraq. Most scholars agree that human civilization can be traced back to the fertile lands between the Tigris and Euphrates rivers. But just how civilized was it? From about 5300 BCE to 2100 BCE, the Sumerians reigned supreme in the valley, thanks to their highly advanced skills in farming, reading, writing, and math. In fact, archaeological evidence suggests that the Pythagorean theorem should be called "the Sumerian theorem." Apparently, Sumerians understood how right triangles worked about 2,000 years before Pythagoras even put on a toga.

Sumerians were pretty advanced when it came to marriage, too. Women were free to have more than one husband, a practice known as polyandry. Further, many women owned property, lent money, and engaged in other business ventures on equal footing with men. Polyandry only became illegal in 2300 BCE, at the tail end of the Sumerian empire. Perhaps that was the civilization's downfall. Within 500 years of restricting women's rights, the Sumerians were all but wiped from the face of the Earth.

Banner ads may be annoying, but thanks to a computer programmer named John Breen, they've also saved millions of lives. In 1999, Breen figured out a way to use advertising to feed the hungry via his website, the Hunger Site. The idea was simple. Instead of giving Breen money for ad space, corporations would donate a fraction of a cent to the United Nations World Food Program each time a person clicked on one of their banner ads. Within a year of its launch, the Hunger Site was receiving 8 million clicks per month and donating $500,000 a month to charity. And the site has continued to grow. In 2009 alone, the Hunger Site donated more than 60 million cups of food to those in need, proving that a better world is just a few clicks away.

20. The First Time the Internet Was Used for Evil

In the early 1980s, the FBI was on the hunt for a syndicate of criminal masterminds. A band of hackers calling themselves the 414s tapped into Manhattan's Memorial Sloan-Kettering Cancer Center and turned off some of the equipment. They'd also infiltrated computers at L.A.'s Security Pacific Bank and poked around the files at Los Alamos National Laboratory in New Mexico, where nuclear weapons were developed.

In 1983, the FBI finally tracked down the hackers, who turned out to be anything but ruthless criminals. The 414s were a group of bored Milwaukee teenagers who'd met in Boy Scouts. (They named themselves after Milwaukee's area code, 414.) Although they became the world's first high-profile hackers, the 414s avoided jail time, mostly because laws against hacking didn't exist yet. After the youngsters testified before Congress about what they did, the federal government passed its first laws against computer trespassing and computer fraud.

21. In the Final Moments of the Civil War

How do you get a tenacious general like Robert E. Lee to surrender? Make him an offer he can't refuse. In April of 1865, General Ulysses S. Grant cornered General Lee at Appomattox Court House in Virginia. After making a last gasp effort to break through Union lines, Lee realized the situation was hopeless. "There is nothing left for me to do but go and see General Grant," he concluded, "and I would rather die a thousand deaths."

But Grant took it easy on Lee. He told him that if he surrendered the Confederate soldiers would be allowed to return home without being imprisoned or charged with treason. Grant also promised to give the starving Rebel troops several days of rations and to let them keep their horses. Lee accepted, knowing it was the best deal he was going to get.

Grant may have defeated Lee, but it was a surprisingly civil affair. As Lee rode away, the Union soldiers began firing their guns and cheering, but Grant quickly put a stop to the frantics. "The war is over," he told them. "The Rebels are our countrymen again." If only all of Reconstruction had gone so smoothly.

22 The Great Pacific Garbage Patch

It's something you'd expect to see in a post apocalyptic movie: a giant vortex of trash, roughly the size of Texas, swirling in the middle of the Pacific Ocean. Except it's real. The Great Pacific Garbage Patch contains about 100 million tons of plastic debris and chemical sludge, which are caught in an endless loop of ocean currents between Hawaii and Japan.

23.
Inside the Earth's Core

A note to anyone considering a journey to the center of the Earth: Hope you like molten iron! Far from Jules Verne's vision of a secret land filled with prehistoric creatures, the Earth's core is mostly iron and nickel, all simmering at temperatures as high as 12,000° F.

The pressure there is also incredibly intense. In fact, it's more than 1 million times greater than the Earth's atmosphere and at the inner core—roughly 3,200 miles below the surface—the pressure is so strong that matter stays solid, despite the scorching heat.

Of course, all of this is debatable, as no one has ever been there. The closest we've come is the Kola Superdeep Borehole, a Russian project from the 1970s that aimed to get as far into the planet's crust as possible. The Borehole managed to tunnel 8 miles down, but that still left it about 1,792 miles short of hitting the outer edge of the Earth's core.

24
The Day the Prophecy Came True in the Desert

About 700 years ago, the Aztec people were wandering through the deserts of Mexico, looking for a place to live. They were following a prophecy, which went something like this: If you find an eagle with a snake in its mouth, sitting atop a cactus in the middle of a lake, build your new home there. In 1325, the Aztecs found what they were looking for in the middle of Lake Texcoco and built the city of Tenochtitlan there.

By the time the Spanish arrived 200 years later, the city had become the capital of the Aztec Empire, a booming metropolis of about 200,000 people. Built on top of the lake, the city was a network of artificial islands, bridges, and canals, all navigated by canoe. It was also surprisingly modern. Fresh water flowed from terra-cotta aqueducts, tapped from springs 2 miles away.

Once the Spanish conquered Tenochtitlan, they built a new capital, Mexico City, on top of it. Today, Mexico City continues to be one of the largest cities in the world. If you want to go there to see an eagle with a snake on a cactus in the middle of a lake, it's not hard to find. It's right there on the Mexican flag.

25, 26, 27
A Government for the People, By the People, Hidden Under the People!

Soon after the Soviets detonated their first nuclear weapon in 1949, the United States began work on three secret lairs designed to keep the government humming, in case the U.S.S.R. decided to strike. **(25)** "Site R" was designed for members of the Pentagon. The 700,000-sq.-ft. complex is hidden beneath 650 acres of rolling hills in Pennsylvania's Blue Ridge Mountains. Meanwhile, the President, his Cabinet, and the Supreme Court were to be airlifted to **(26)** "High Point," a 600,000-sq.-ft. shelter under Mount Weather, Va., complete with fully equipped hospital and TV studio. As for Congress, they got **(27)** "Casper," a 112,000-sq.-ft. bunker located beneath the Greenbrier resort in White Sulphur Springs, W.Va. These digs were sure to be comfortable, the underground pad is a precise replica of the House and the Senate chambers.

28

Where Antimatter Still Exists

Producing a single gram of antimatter costs about $62.5 trillion. Then it takes about 40 billionths of a second for it to disappear.

To wrap your head around what antimatter is, take everything you remember from high school science and reverse it. Matter is composed of positively charged protons and negatively charged electrons, whereas antimatter consists of positively charged electrons and negatively charged protons. When fast-moving matter collides with other fast-moving matter, antimatter is formed, releasing energy. After the Big Bang, some antimatter was formed, but it's pretty hard to find.

Antimatter does exist, though. It usually occurs in places where particles of ordinary matter travel very quickly and collide with one another. In 1997, astronomers discovered a fountain of hot antimatter flowing in the center of the Milky Way. And in 2002, a solar flare—a powerful explosion emanating from the surface of the Sun—created about a pound of antimatter that was quickly annihilated.

Scientists have also tried to grow their own antimatter here on Earth, and they've succeeded several times. The problem is, the process is expensive. In 1999, NASA estimated that the price of producing a single gram of antimatter is about $62.5 trillion. All that cash doesn't buy you much time with your antimatter, either. It takes about 40 billionths of a second for antimatter to come into contact with matter and disappear. So why bother? Because even a small amount of antimatter would make an unbelievably potent fuel. In 2002, a NASA scientist told the press that a raisin-size amount of antimatter could generate enough energy to fuel a rocket to space

The Hotel Chelsea, Where America's Ghosts Got Talent

Want to be scared silly and star-struck at the same time? Reserve a room at Manhattan's Hotel Chelsea. For the past 100 years, the hotel has been a temporary residence for scores of famous writers, artists, and musicians, some of whom never checked out. On the way to your room, you might bump into the ghost of Sex Pistols bassist Sid Vicious, who's been seen holding the elevator and stopping it on random floors. Or, if you stay in room 206, you may have to share it with Welsh poet Dylan Thomas, who fatally collapsed there after a drinking binge in 1953. The ghost of novelist Thomas Wolfe is said to stalk his former digs on the eighth floor, in an apparent contradiction of his declaration that "you can't go home again." The Chelsea may or may not be the most haunted place in the world, but its ghosts are definitely the most accomplished

32 [illegible]

Papua New Guinea is the most ethno-linguistically diverse place on the planet. The 3.5 million people there speak 869 distinct languages!

Other Fascinating, Spooky Places in the Space-Time Continuum:

30. The White House

The Obamas have some spirited company in their new digs. Numerous servants and dignitaries have seen Abraham Lincoln's ghost roaming the halls. Winston Churchill even said Lincoln once walked in on him in the bathtub! But Honest Abe isn't the only specter looming. Andrew Jackson's laughter and footsteps can be heard in the Rose Bedroom, and First Lady Abigail Adams has been spotted carrying loads of laundry to the East Room, where she used to hang her clothes to dry.

31. The Roosevelt Hotel

Not to be outdone by New York, Los Angeles also has its share of phantom celebrities. The ghost of Marilyn Monroe still wanders around her suite at the beloved Roosevelt Hotel in Hollywood, where she reportedly admires her reflection in a full-length mirror.

33. At the Creation of Canned Laughter

It's been scientifically proven that people laugh more when they're with other people. So how do you make people laugh when they're watching TV alone at home? Early television producers tried taping comedies in front of live studio audiences, but the reactions were unpredictable. Sometimes crowds laughed too loudly or for too long, and sometimes they didn't laugh at all.

In the late 1940s, Charlie Douglass, a technical director for live shows, solved the problem. He collected hours of audience reactions to old shows and combined them on a tape machine he called the "Laff Box." The machine not only added giggles, chuckles, hoots, and hollers, but it also manipulated noises in a way that could make the audience sound louder, softer, older, younger, male, or female. The Laff Box made its debut in 1950 on NBC's *The Hank McCune Show*, and TV producers immediately fell in love with canned laughter. The studios were finally free of fickle live audiences and, better yet, they were at liberty to film outside the studio—anytime, anywhere. Viewers at home have been laughing on cue ever since.

34 In Pompeii on the Day of the Eruption

Back in 79 CE, Pompeii was a booming, cosmopolitan city. Its 20,000 residents enjoyed all the temples, amphitheaters, and baths one would expect to find in the Roman Empire. They even indulged in some of the world's first fast food. Archaeologists have found tons of small, portable food boxes scattered around the remains of the city, indicating that Pompeians ordered plenty of meals to-go, probably with a side of the delectable fish sauce that Pompeii was famous for.

Although Pompeii's citizens lived a carefree existence, they never labored under the illusion that Mount Vesuvius, the big volcano next door, was a regular old mountain. Seventeen years before the eruption, a powerful earthquake nearly leveled the city, leading most people to think something was awry. So, when a giant plume of smoke began shooting out of Vesuvius after midday on August 24, 79 CE, many Pompeians prepared for their escape. While some managed to flee the blast, which lasted for 19 hours, the majority were buried in a downpour of ash and pumice. In a futile attempt to guard themselves from the shower of rocks, some Pompeians tied pillows around their heads, but it didn't help. Those who survived were killed the next morning, when a glowing cloud of poisonous gas engulfed the city. For days, debris continued to rain down on Pompeii until it was covered in 20 feet of rubble. But perhaps the most astounding fact about Pompeii is that, despite the city's history, folks still want to live there. Today, nearly 2,000 years after the eruption wiped out the city, 2 million people reside at the base of Mount Vesuvius.

35. An Island within an [illegible]

Island vacations can help you get away from it all. But if a single body of water between you and the rest of the world isn't enough, why not try three? Our favorite triple island is Ryan Island, located in Michigan's Isle Royale National Park. It has the distinction of being the largest island on the largest lake on the largest island on the largest lake in the world. (Yup, read it again.) Just telling people about where you're going should make you feel plenty isolated.

36

At the Amusement Park in Catherine the Great's Backyard

In the 17th century, Russian daredevils created the world's first roller coasters. The structures were 70-ft.-tall, wooden toboggan tracks that were built on steep mountain slopes, then coated in ice. As if a ride down wouldn't be fast enough, they made the sleds out of ice, too. The Russian people loved them, and so did Catherine the Great. She had a few built in her backyard.

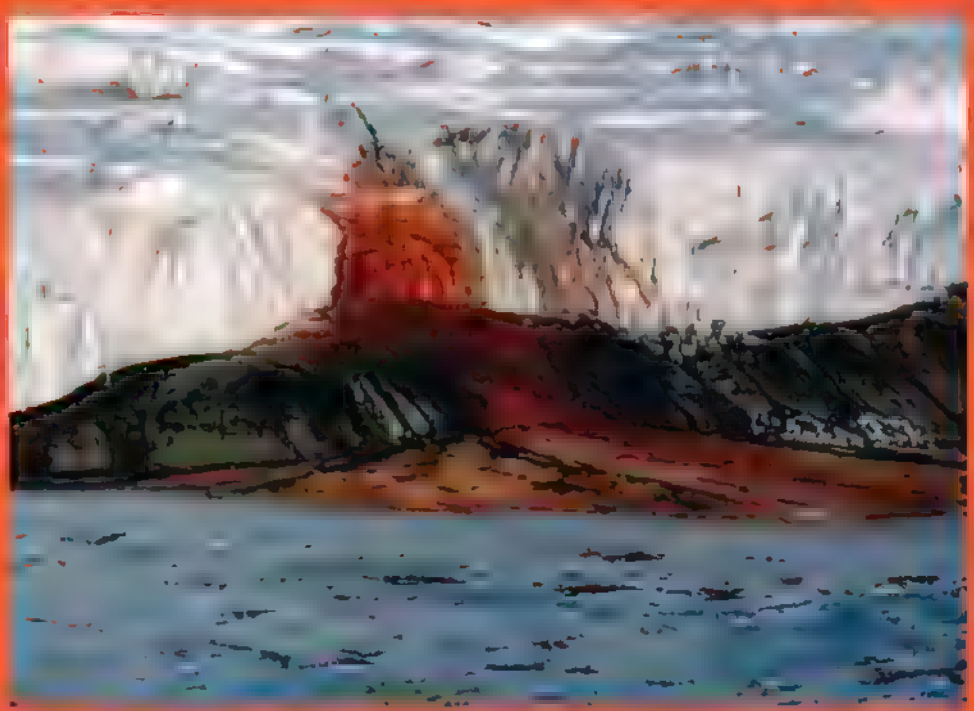
37. In Marfa, Texas

In some ways Marfa is just like any other ranching town in west Texas. Most of the 1,800 people who live there raise cattle, horses, pigs, and chickens. And yet it stands apart. Marfa's mysterious bleak, wide-open spaces have attracted filmmakers from across the country to the region. (Oscar nominees *No Country for Old Men* and *There Will Be Blood* were both shot there.) But the town is also a magnet for artists and fans of the paranormal alike.

In 1971, famed minimalist artist Donald Judd moved from New York to Marfa. Almost immediately, the town became the epicenter of the conceptual art scene. Judd took over a decommissioned U.S. Army base and used it to create the Chinati Foundation, a minimalist art compound that celebrates emptiness, eternity, and infinite space. Today, Marfa hosts about a dozen contemporary art galleries, roughly one for every 150 residents.

Those who don't journey to Marfa for its fresh beef and culture are sure to there to see the mysterious set of "ghost lights" that appear in the desert just east of town. For the past 50 years, curious viewers have flocked to the area to watch colored balls of light float across the landscape at night. Some say the orbs are navigational markers for aliens, while others maintain that the Marfa lights are merely the headlights of cars on U.S. Highway 67 in the distance. Whatever the case, they only make this strange town stranger.

38
At Antarctica's Blood Falls

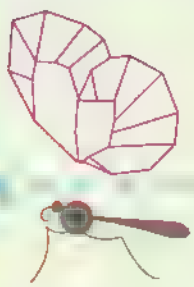


39. The Library of Congress in 2020

Don't worry; all the books will still be there. But the Library of Congress will be moving forward with a number of unusual projects that will expand the scope of the library. For instance, the "Birth of the Dot Com Era" initiative will allow anyone to access the business plans, marketing documents, and investor presentations for more than 2,000 Internet-age start-up companies. Plus, every Tweet on Twitter will be catalogued for future historians.

40.
Inside a Black Hole

We've got some bad news: If you ever have the rotten luck to be sucked inside a black hole, you won't be able to see what's going on—unless, of course, you have three eyes. Let us explain. Black holes are collapsed stars with such intense gravitational fields that not even light can escape them. In fact, the gravitational pull is so great that it bends light, distorting space and time, and our binocular vision simply can't process that. But scientists think that if you had three eyes instead of two, the extra eye could give you just enough added perspective to correctly perceive distance within a black hole



41.
Where the Wingless Things Are

Located in the southern part of the Indian Ocean between Madagascar and Antarctica, the Kerguelen Islands are so windy that most of the insects, including beetles and butterflies, have no wings. Why? Flying insects can't survive there because the heavy gusts (regularly 60 mph) blow them out to sea

46. With the Dinosaurs on Their Doomsday

As you've probably heard, the most accepted theory of what happened to the dinosaurs about 65.5 million years ago entails a giant asteroid slamming into Earth and kicking up a giant cloud of dust. This explanation gets support from the high levels of iridium—an element that's rare on Earth but much more common in meteorites—that appeared at this time. It also gets support from the 110-mile-wide crater that geophysicists discovered in 1978 in the Yucatán Peninsula, where the giant meteor probably landed.

So what was it like to be on Earth when the asteroid hit? Scientists estimate that the impact of such a large meteor hitting the Earth would have been equivalent to detonating 100 *million* tons of TNT. Not only that, but the collision would have triggered an earthquake more than 1,000 times more powerful than the largest one ever recorded by man. Plus 65.5 million years ago, the Yucatán Peninsula was underwater, so the fireball would have fallen through water, generating enough heat to boil the oceans. Amazingly, earthquakes and boiling seas were only the beginning of the dinosaurs' woes. The resulting dust cloud would have blocked out the sun, killing all vegetation. Any dinosaur that survived the asteroid impact probably died of starvation.

45

The Skyscraper Farms of 2050

In the near future, city folks and country folks may finally live as one. Columbia University professor Dickson Despommier and several other architects are currently designing ways to farm in urban environments. Despommier envisions 30-story glass greenhouses scattered across city skylines, growing crops on the rooftops. Just one of these buildings could feed 50,000 people a year, meaning that 160 of them could feed all of New York City. Skyscraper farms would also reduce the massive carbon emissions resulting from the transportation of fruits and vegetables across the country. In a few decades, newlyweds will no longer have to face the dilemma that plagued the couple on *Green Acres*—they'll be able to keep the city *and* the country.

47

The Playground Made from Old Tires in Tokyo

At Tokyo's Nishi-Rokugo playground (or "Tire Park"), all the equipment is made from old tires—surprisingly adorable old tires. There are tire swings, tire slides, tire robots, tire dinosaurs, and tire dragons. The playground was built in 1982, using 3,000 spares donated to the city by the Kawasaki motorcycle company.

44. [illegible]

In 1810, British merchant Peter Durand patented **(42)** the tin can, revolutionizing how foods were preserved. But there was a slight problem; people could barely open them. The instructions on cans actually told consumers to use a chisel and hammer to get to the grub, and **(43)** half a century went by before another inventor came up with a solution. A Connecticut man named Ezra Warner finally patented a can opener in 1858, but even then, the machine was so clunky and expensive that only grocery stores invested in them. Instead, people would make special trips to the grocer just to have a clerk open their cans. **(44)** From there, it only took *another 12 years* to invent a can opener that people could actually use at home. Fellow Connecticut inventor William Lyman claimed the honor in 1870, taking the lid off 60 years of canned frustration.

48. Inside NORAD's Mountain

An impenetrable fortress carved 2,000 feet deep into a granite mountain? It may sound like a super-villain's secret lair, but the headquarters of the North American Aerospace Defense Command, or NORAD, is very real. In the late 1950s, the United States and Canada became so worried about the possibility of a Soviet attack that the two countries joined forces to create NORAD inside Cheyenne Mountain near Colorado Springs. The command center is designed to monitor the skies, protecting the continent from missiles, planes, and attacks from space. In the event of a nuclear blast, the facility's 25-ton armored doors could easily withstand the explosion. Of course, NORAD has lost some of its clout since the fall of the Soviet Union. Today, it no longer watches the skies for communists, but instead, keeps a lookout for drug traffickers and terrorists.

49

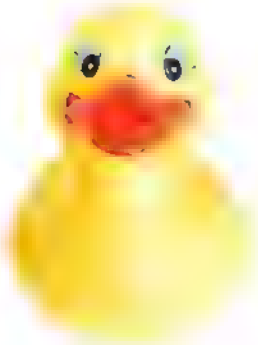
The Day the Sun Swallows up the [illegible]

[illegible] will be [illegible] burned [illegible] consumed [illegible] will [illegible] Mercury [illegible] But don't [illegible] be living [illegible] expected to [illegible] in about a billion [illegible]

50

... and The Day We All Pack Up and Move to Pluto

Although the expansion of the Sun is bad news for life on Earth, it could be good news for life somewhere else. Around the time that Earth turns into a hunk of molten lava, the ice worlds of the outer solar system will melt, possibly becoming fit for human life. Someday, we might be calling Pluto home. Guess who'll get to be a planet again?



Rubber Ducky: *(noun):* a toy shaped like a duck that is normally used during bath time.

Tomato: *(noun):* any of several plants belonging to the genus Lycopersicon, of the nightshade family, native to Mexico and Central and South America.

Mensa Member: *(noun)* undefined.

There are some things in life that are easily defined; others aren't so quick to be boiled-down. Mensa members fall into the latter category. With members from every walk of life, career and background, Mensa offers the kind of variety and intellectual stimulation that you'd be hard-pressed to find anywhere else.

Want to expand your social circle to include a new group of diverse and intelligent people? Try Mensa!

American MENSA®

www.us.mensa.org/mentalfloss

4 PUBLIC WORKS OF ART GONE TERRIBLY WRONG

By Elizabeth Lunday

1

DIEGO RIVERA'S "Man at the Crossroads"

THE MORAL: Never hire a communist do a capitalist's job.

During the Great Depression, Mexican artist Diego Rivera was on a roll. In 1931, he painted a massive mural for San Francisco's Pacific Stock Exchange. And by 1933, he'd completed two more enormous murals of Ford's assembly line for the Detroit Institute of Arts. But there was a disconnect in Rivera's work. Although the artist was a vocal and committed communist, his art was decidedly capitalist. After a few friends pointed out the hypocrisy, Rivera decided to put his paintbrush where his mouth was.

Opportunity knocked in 1932, when the Rockefeller family hired Rivera to create one of his signature paintings in the lobby of the new RCA Building in Rockefeller Center. Their suggested theme for the work was "Man at the Crossroads Looking with Hope and High Vision to the Choosing of a New and Better Future" —an allusion to the crossroads between industry and technology. Rivera's final product depicted a crossroads, but hardly in the way the Rockefellers had intended. Instead, the sprawling 63-foot masterpiece illustrated two alternate futures: a communist heaven and a capitalist hell.

Rivera might have gotten away with his political statement if it hadn't been for one detail—he painted his personal hero, Vladimir Lenin, into the piece. When building managers realized Rivera was filling their lobby with Red propaganda, they ordered him to cease and desist. To preserve the art, the Rockefellers asked Rivera to morph Lenin's portrait into an unrecognizable worker. But when the artist refused (Rivera offered instead to balance the picture with a portrait of Lincoln), he was paid his full fee, then barred from the site. The mural was immediately covered, and months later, workers were ordered to destroy the work altogether.

It wasn't long before the artist got his revenge. Later that year, Rivera re-created the piece *[pictured above]* for the Palacio de Bellas Artes in Mexico City. Only this time, he added a portrait to the capitalist side; it was of Nelson Rockefeller, holding a martini glass, under a swarm of syphilitic bacteria.

2

ROBERT ARNESON'S "Portrait of George"

THE MORAL: If you're going to put the Mayor on a pedestal, don't build that pedestal with Twinkies.

In 1978, after mayor George Moscone and city supervisor Harvey Milk were assassinated, the city of San Francisco wanted to commemorate its fallen leaders. Officials set about building a new convention center in Moscone's honor, and held a competition for a proper memorial sculpture to be displayed in the lobby. Artist Robert Arneson quickly won over the selection committee with his proposal for a grinning, oversize bust of the slain mayor.

But when the sculpture was unveiled in 1981, it was met with gasps of horror. The audience wasn't shocked by Moscone's smiling head, but by its nearly 5-foot-tall pedestal, which was imprinted with five bloody bullet holes and graffiti that read "BANG BANG BANG" and "HARVEY MILK TOO." Arneson even included an image of a revolver and a Twinkie—a reference to the assassin, Dan White, who'd tried to exonerate himself in court by arguing that junk food binges were to blame for his violent mood swings.

Arneson claimed he was trying to portray the totality of the crime, but San Franciscans wouldn't have it. Mayor Moscone's successor, Dianne Feinstein, denounced the work, and the city demanded its money back.

A handful of people did appreciate the sculpture, though. A private collector purchased the piece immediately, and in 1997, "Portrait of George" resold for $155,000. Today, even Feinstein agrees the work would be "appropriate for a museum." Just don't count on it showing up in the Moscone Center lobby anytime soon.

3 HORATIO GREENOUGH'S "George Washington"

THE MORAL: Founding Fathers look less distinguished in the nude.

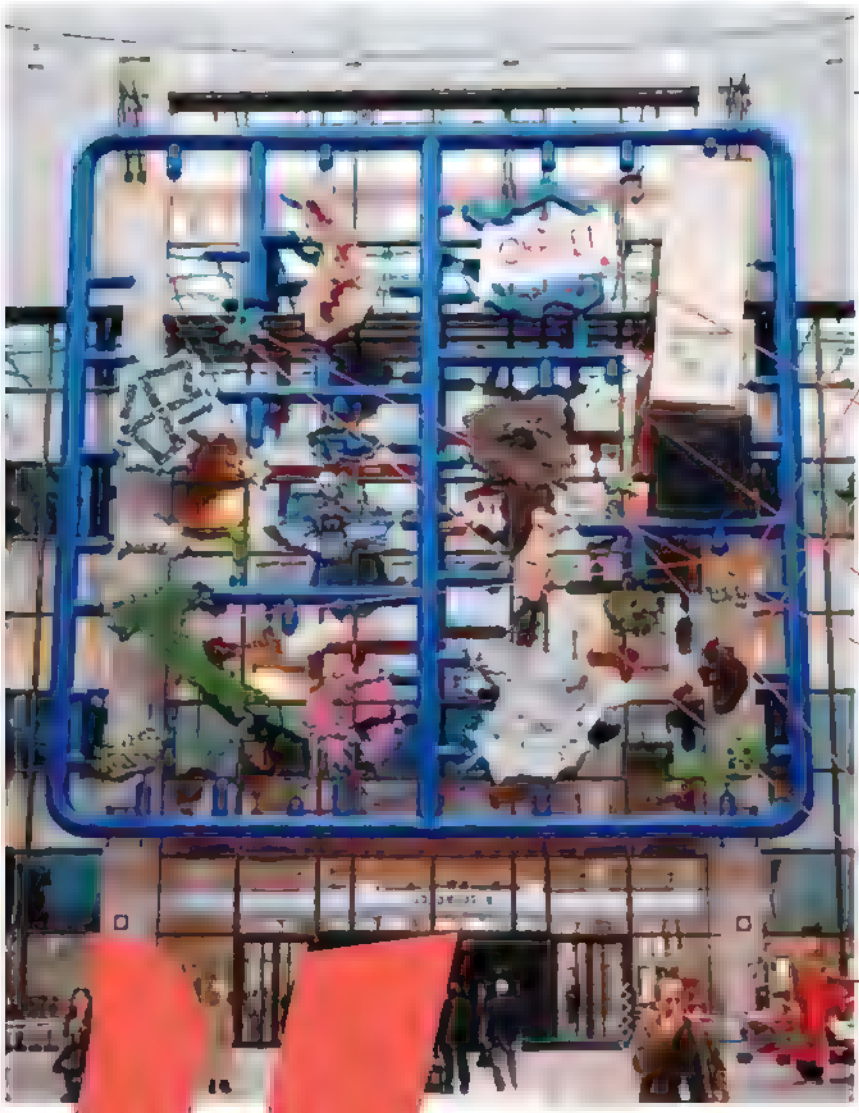
In 1832, Congress commissioned a giant sculpture of George Washington for the 100th anniversary of the President's birth. They tapped artist Horatio Greenough for the job, and he seemed like a perfect fit. Not only did the Boston native come with a great reputation, but he'd also trained in Rome with the best European artists. Considering Greenough's background, Congress assumed that his work might be classically influenced. What they didn't expect was to see the Founding Father on a pedestal, naked as the day he was born.

To be fair, Horatio Greenough had good intentions. Inspired by ancient depictions of Greek gods, the artist wanted to portray America's first president with the strength of Zeus, bestowing power on the people. But when Greenough unveiled his work in the Capitol rotunda, the audience didn't get it. Instead of greeting the statue with thunderous applause, onlookers simply gawked and snickered at the half-naked George Washington. Wrapped loosely in a toga, the president looked out of character with his nipples and belly button exposed. Worse still, Washington's arm was extended outward in a grand gesture, and many in the crowd joked that the embarrassed president was trying to reach for his clothes.

Congress was outraged. They tried to relocate the piece, eventually sticking it on the east lawn of the Capitol. By 1908, however, politicians had acquired a sense of humor about the sculpture, and the statue was moved to the Smithsonian. Today, it can be seen in all its naked splendor at the National Museum of American History.

- **Ridiculous Stunts by Modern Artists**
- 10 Glorious Works of Outsider Art

MORE stories about art at mentalfloss.com/more



THOSE TYPICAL EUROPEANS

States of the Art

In David Černý's "Entropa," every country is a parody of itself. Here are a few of the highlights

- **DENMARK** is built of LEGO blocks.
- **FRANCE** is draped in a banner reading "STR.KE!"
- **IRELAND** is a brown bog with bagpipes sticking out of Northern Ireland
- **ITALY** is a soccer field
- **LUXEMBOURG** is a gold nugget labeled "For Sale"
- **THE NETHERLANDS** is disappearing under the sea. Only a few minarets protrude from the water, a reference to Dutch filmmaker Theo van Gogh, who was assassinated by radical Islamists.
- **POLAND** features a group of Catholic priests raising the Gay Pride flag
- **THE UNITED KINGDOM,** known for its relative isolation and disdain for European politics, is missing.

4

DAVID ČERNÝ'S "Entropa"

THE MORAL: Not everyone appreciates racist, nationalist humor.

On January 1, 2009, the Czech Republic took over the revolving presidency of the European Union, and to commemorate the event, the government turned to Czech artist David Černý. For his piece, Černý proposed working with 26 other artists, one from each EU member nation, to create a grand monument. But when "Entropa" was unveiled on January 12, the international community was scandalized. Rather than celebrating Europe, "Entropa" mocked each and every country.

"Entropa" is a huge map in which each nation is represented as a stereotype. Some are silly; others are blatantly offensive. Romania is depicted as a Dracula theme park; Germany is a network of motorways that resembles a swastika; Sweden is a large, IKEA-style box; Bulgaria is a collection of squat toilets.

Upon seeing the work, the Bulgarian government immediately issued a formal complaint. The controversy grew when newspapers noticed that Černý's "team" of international artists was nowhere to be found. Černý soon admitted that they didn't exist; his only collaborators were his two assistants. Outraged, Czech officials accused him of misappropriating state funds, but Černý insisted that he'd always intended to return the money. Three days later, when the work was ceremonially presented to the public, Černý formally apologized to the Czech government. He said his intention was "to see if Europe is able to laugh at itself." Apparently, it can't.

SPINNING THE GLOBE

bolivia

GETTING YOUR BEARINGS

BY WENDY DALE

THE BASICS: Landlocked in the center of South America, Bolivia is roughly three times the size of Montana.

BOLIVIA'S BEACHES ... are a sore subject. Once the proud owner of a beautiful coastline, Bolivia ceded its last port city to Chile on March 23, 1879. Today, Bolivians commemorate that date with the Day of the Sea—a national holiday when citizens listen to recordings of seagulls and mourn the loss of the country's oceanfront property.

THE CAPITAL OF BOLIVIA IS ... in two places! The judicial branch is in Sucre, while the executive and legislative branches are located in La Paz.

WHO LIVES IN BOLIVIA? Sixty-two percent of the population is indigenous, 10 percent is white, and just about everyone else is mixed race.

MINORITY REPORT: Although indigenous people are in the majority, they face considerable discrimination. On average, they make less than half as much money as their white countrymen. But things are changing. In 2005, Bolivia elected its first indigenous president, Evo Morales.

CURE FOR THE COMMON QUECHUA: Once the official tongue of the Incan empire, Quechua is still the first and only language of many Bolivians. To foreign ears, Quechua sounds an awful lot like sneezing. That's because the language is full of explosive consonants that require gusts of air to pronounce.

YOU SAY, POTATO; I SAY, WHAT KIND? The Irish may be more famous for eating them, but potatoes originally come from the Andes, where more than 1,000 varieties thrive. Needless to say, Bolivia is not the best place to start your low-carb diet.

JESUS IS HUGE: When it comes to enormous statues of Jesus Christ, nobody beats Bolivia. The city of Cochabamba features the world's tallest statue of Jesus, the *Cristo de la Concordia*. At 133 ft. tall, it makes Rio de Janeiro's more famous Christ the Redeemer look like a baby Jesus.

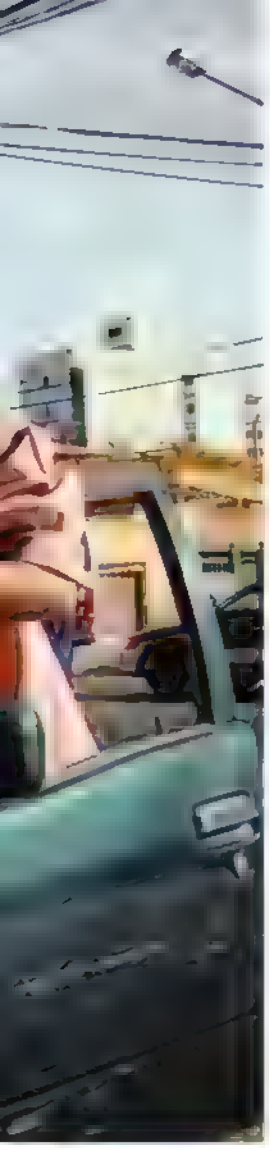
The 50¢ Tour

Fuel for National Pride

It's difficult to overlook gas stations in Bolivia. Not only are the pumps manned exclusively by young women in tight-fitting clothes, but the gas stations also represent one of the nation's most treasured resources—natural gas.

Bolivia's abundance of natural gas is a point of pride, and it's been the subject of more than a few political controversies. Perhaps the worst was the Gas War of 2003. At the time, President Gonzalo Sánchez de Lozada was trying to build a pipeline to export the gas through Chile, Bolivia's unfriendly neighbor to the west. The idea infuriated ordinary Bolivians, who wanted the government to nationalize the gas industry and share the wealth with Bolivians instead of foreign investors. In September, hundreds of thousands of farmers, students, and union workers hit the streets in protest, constructing massive roadblocks throughout the country. But things took a turn for the worse when state security forces opened fire on the protestors, killing 60 civilians. The president was soon forced to resign, but the main issue behind the upheaval remained unresolved for years.

In December 2005, Bolivians elected their first indigenous president, Evo Morales, who campaigned on a platform of nationalization. Once in office, he made good on his promise and signed a decree that handed the industry over to the Bolivian public. These days, natural gas is used to fuel the country's cars. It's sold by pretty girls at gas stations, right there next to the diesel and gasoline



In 2007, controversy erupted in Bolivia after the world soccer federation, FIFA, forbid matches from being played in La Paz. Officials felt the city's high altitudes presented a danger to the players' health. Bolivians were outraged. To make a statement, President Morales promptly hit the streets of La Paz and played four straight games.

The Nicest Landlords Ever!

You can't beat a country that offers free rent. In Bolivia, some landlords use a tenant system based on what's called an *anticrético* contract. Here's how it works: You give your landlord a lump sum of cash, which he invests, and when you move out, your entire original sum is given back to you! The understanding is that, because the landlord is investing your money and making a profit off of it, it's pretty much a win-win for everyone. Of course, you need a large chunk of change to rent—at least several thousand dollars. But it still beats any deal we've seen on Craigslist!

A Fight Club You Can Talk About

Every May, residents in the village of Macha host a fight club based on a 1,000-year-old tradition called Tinku. Fueled by alcohol and music, both male and female participants gather to throw punches (and rocks) at one another. While Tinku often results in a few deaths, participants don't believe the casualties are in vain. The annual event is a tribute to the Andean Earth goddess Pachamama. Any blood spilled is seen as a holy offering that ensures a fruitful harvest.

Taxi Cab Concessions

Don't be surprised if your taxi driver keeps picking up other passengers after you've hopped in. Many cabs in Bolivia work as *taxi-trufis*, shared cars that follow a set route, like a bus. The cab industry is completely unregulated there. In fact, all it takes to become a taxi driver is a car (any size or shape will do) and a large sticker on the windshield that says "Taxi."

Also, you may need to tell your driver to slow down or speed up. Often, the cabs are imported from countries where the speedometer is on the right side of the car. Once the vehicle reaches Bolivia, its steering wheel is switched to the left, but the speedometer remains as is, because it's expensive to move. As a result, most drivers can't see how fast they're going.

Height Management

At 12,000 feet above sea level, La Paz is the highest capital city in the world, more than twice as high as Denver. As a rule, Bolivians scoff at high altitudes, but that doesn't mean they don't have to deal with altitude sickness. Their solution? Coca leaves. Bolivians claim that *soroche* can be cured by drinking tea made from coca, or simply by placing a wad of the leaves in your cheek and sucking on it until your teeth turn green. In its leaf form, coca is a mild stimulant, useful for combating light fatigue and headaches.

In Bolivia, people regularly eat llama meat. It's often dried, salted, and fried in oil, making a tasty treat known as *ch'arki*. In the United States, we call it "jerky"—one of the few English words that comes from Quechua.

SPINNING THE GLOBE
bolivia

Bloodsucking Vampires

When two parasites join forces, it rarely spells good news for humans. In Bolivia, the collaboration of two bugs has created a lethal illness called Chagas disease, which infects more than 1 million people nationwide. One of the culprits is the vinchuca beetle, which lives in the thatched roofs that are common on houses in the region. At night, these "kissing bugs" crawl out of the roofs to feed on humans. For the most part, vinchucas are just annoying, but some are infected with *Trypansoma cruzi*, a pernicious, single-cell parasite. When transmitted to humans, the parasite can live and reproduce in the body for more than a decade before inflicting any noticeable damage. But once the disease kicks in, heart attacks and organ failure soon follow. At that point, Chagas disease can't be cured. The Bolivian government is working hard to increase prevention, though. So far, the most successful measure has been helping villagers replace their thatched roofs with ones made from corrugated metal. Without a thatched roof, the beetle has no place to live, and no people to "kiss" at night.

Bolivia has lost every international war it's participated in since gaining independence from Spain in 1825. In fact, Bolivia doesn't even need a war to forfeit territory. Local lore claims that President Mariano Melgarejo gave up large swaths of land to Brazil in the 1860s, all in exchange for a horse.

What's up with all those women in bowler hats?

The indigenous women of the Bolivian Andes, known as *cholitas*, have a sense of style all their own. The traditional cholita outfit consists of a colorful, ruffled skirt called a *pollera*, and a bowler hat? The trend goes back to the 1920s. As the story goes, a shipment of the British hats was sent to European railroad workers in Bolivia. But when the hats turned out to be the wrong size, the Europeans didn't want them. The bowlers were swooped up by Bolivian women, and the rest is fashion history.

Dressing as a cholita can mean facing discrimination, though. But as the indigenous people of Bolivia have gained power and status, more and more women have wanted to be identified with the native culture. In large cities, women in traditional garb walk alongside women in business suits. And since Evo Morales became president in 2006, he's appointed several cholitas to his cabinet. Now, at presidential balls, white tie is optional—and so is the bowler hat.

TRAVELER'S NOTEBOOK

Celebrating the Glass Half Empty

BY WENDY DALE

Right now, Bolivia is experiencing a surge of modernity like never before. The Internet has become ubiquitous, and at the busy open-air markets of La Paz, laptops are sold alongside fruits and vegetables. But even as the country embraces the latest technology, it does so on uniquely Bolivian terms. I've spent five years living in this Andean nation, and even now, when a *cholita* reaches into the shawl on her back, I'm never sure if she's going to pull out a baby or a cell phone.

For Bolivians, moving forward doesn't mean letting go of the past. I realized this the first time I saw the ritual of the *ch'alla*. At the time, I was staying with my parents in Cochabamba, the third largest city in Bolivia. In our living room, a woman in traditional dress was trying to sell fossils to my father, a geologist. My mother offered her a glass of cold lemonade, which she took gratefully. Then, with a flick of her wrist, she dumped most of the contents onto the floor. I watched, stunned, as a long stream of yellow liquid made its way across the linoleum tiles of my parents' living room.

In time, I came to understand that the woman was making an offering to Pachamama, the Andean Earth goddess. According to Incan tradition, drinks must be poured on the ground and "shared" with the goddess before consuming. (The Incans lived in huts with dirt floors, so the cleanup was easier.) In return for the offering, Pachamama grants favors, like a fruitful harvest or success in business. In this case, the woman spilling lemonade on my parents' floor hoped the Earth Mother would make my father buy her fossils.

Pachamama is still revered—not only by people in the countryside but by educated, urban professionals.

Today, Pachamama is still revered—not only by people in the countryside, but also by educated, urban professionals. Many of them are Catholics, who see no contradiction in paying tribute to the Incan Earth Goddess and also attending Sunday mass. That marriage of past and present is so much of what I've grown to love about this country. As I sit in an Internet cafe in a tiny village, I can watch llamas wander the cobblestone streets outside. When teenagers exchange music with their MP4 players, Lady Gaga is just as popular as the Quechua group the Kjarkas. And this past February, when President Morales vowed to send the country's first satellite into orbit by 2013, I'm sure some Bolivians celebrated with a toast—one that included an offering to Mother Earth.

President Morales participates in a *ch'alla* ritual in front of the Government Palace in La Paz

MORE
• Walking on Glaciers
• Stunning Photos of the World's First Ghetto
Plus MORE stories from around the world at mentalfloss.com/more

BOLIVIA:

Where Beauty Is Queen

In Bolivia, pageants are about a lot more than beauty; they're about the country's ongoing civil-rights struggle.

BY WENDY DALE

Bolivia and Peru have disagreed on a number of modern issues—energy policy, border control, drug enforcement. But in August 2009, the tension between these South American neighbors reached an unprecedented level. Bolivia accused Peru of stealing. In fact, Bolivian officials were so outraged by the act that they threatened to take the matter to an international tribunal at The Hague. But what did Peru steal that was so upsetting to Bolivia? The idea for an outfit, worn by Miss Peru at the Miss Universe pageant.

As part of the Miss Universe pageant, each contestant is asked to parade across the stage in a gown or costume that represents her home country. During the 2009 pageant, Miss Mexico appeared in a tight mariachi outfit; Miss India wore a revealing, sparkly sari. Meanwhile, Miss Peru's costume featured an elaborate cape and horned headpiece, inspired by an ancient Andean ritual known as *La Diablada*, or The Devil's Dance. The Bolivian government immediately cried foul, claiming that the dance originated in the Bolivian city of Oruro. Moreover, it considered the costume an act of cultural theft.

The controversy played out in the media like a catfight between diplomats, as public-relations officers from both countries exchanged barbs in the press. Eventually, the feud faded. But even when the conflict was at its height, no one bothered to ask the obvious question: "Why was Bolivia so upset over a beauty pageant?"

MIRROR, MIRROR, ON THE WALL

Anyone who's been to Bolivia knows that beauty contests are a big deal there. Newspapers lead with stories about the pageants, and winners often become national heroes. According to Edmundo Paz Soldán, one of Bolivia's best-known novelists, "Beauty queens and models are our precarious royalty."

Paz Soldán speaks from firsthand experience. Two years ago, he had the misfortune of judging one of the most controversial pageants in the country's history, the 2008 Miss Bolivia contest. Historically, winners of this contest have come from Media Luna, a region of Bolivia known for its tall, light-skinned, European-looking women. But in 2008, breaking decades of tradition, the judges selected a woman from Cochabamba, a city in the heart of the indigenous Quechua culture. Shortly after the new Miss Bolivia was crowned, a riot erupted. Fists flew throughout the auditorium, and several people were injured. It took security nearly an hour to quiet the crowd. Fearing for his safety, Paz Soldán fled out the back door.

As the 2008 contest demonstrated, Bolivia is a nation still deeply divided by racism. It never truly freed itself from the values imposed by the Spanish empire centuries ago, when Indians were viewed as second-class citizens. Sadly, they're still seen that way today, despite the fact that whites only represent 10 to 15 percent of the population.

Bolivia's white minority is largely concentrated in Media Luna, where the people there consider themselves separate from the rest of the country. It's an attitude summed up by 2004's Miss Bolivia, Gabriela Oviedo: "Unfortunately, people that don't know Bolivia think that we are all just Indian people—poor people, and very short people and Indian people. I'm from the other side of the country. And we are all tall, and we are white ... and we know English."

The racial divide is so deep that the Media Luna region constantly threatens to secede and form its own independent nation. It almost succeeded in 2005, after Bolivia elected Morales president. That year, Media Luna held a referendum on secession that received a whopping 85 percent of the vote. However, the motion was stifled when the courts declared it unconstitutional.

Shortly after the new Miss Bolivia was crowned in 2008, a riot erupted in the auditorium. Fearing for his safety, Paz Soldán fled out the back door.

A PRETTIER PICTURE

Despite the racism in Media Luna, there are signs that Bolivia is coming together rather than splintering apart. Since his election, President Morales has helped bring into question long-held notions of race and beauty. For example, he named the first *cholita*—an Indian woman who wears traditional dress—to his cabinet. It was seen as a bold, controversial move at first, but since then, the country has slowly rethought the value it places on its native culture. Once marginalized, cholitas are now becoming role models. They anchor the nightly news and host their own television programs.

These days, cholitas also walk the runway, as part of the annual Miss Cholita La Paz pageant, which celebrates the beauty of indigenous women. They appear not in bikinis, but in bowler hats and colorful ruffled skirts, their freshly scrubbed faces free of makeup. Their choice of traditional shawl and their ability to speak the native language of Aymara factor into their scores. Also, impostors are strictly forbidden. The 2007 winner was stripped of her title minutes after receiving it, because the judges learned that her long hair braids were actually extensions.

The Miss Cholita pageant is hugely important to the Indian population, but it's still small potatoes compared to the prestige of the Miss Bolivia pageant. To date, an indigenous woman has never competed for the title of Miss Bolivia. (The winner of the controversial 2008 contest wasn't from Media Luna, but was still of European descent.)

In the end, the big question is not whether an indigenous woman will hold the title of Miss Bolivia someday; it's whether Bolivia can become a country that treats people of all races with fairness and dignity. It's an ambitious task, but one that President Morales has committed himself to. Only time will tell if he earns his crown, or if he simply becomes another pageant contestant hoping for world peace.

QUIZ

BY KARA KOVALCHIK & SANDY WOOD

USE #2 PENCIL

1 Which playing card is colloquially known as "The Devil's Bedpost"?

2) How many 180° bends are in a common paper clip?
[a] two
[b] three
[c] four
[d] five

3) What famous aviator was presented with the first Distinguished Flying Cross medal?
[a] Charles Lindbergh
[b] Wiley Post
[c] Amelia Earhart
[d] Orville Wright

4) Nightclub owner Jack Ruby assassinated which of the following men?
[a] John F. Kennedy
[b] Dr. Martin Luther King, Jr.
[c] Lee Harvey Oswald
[d] Robert F. Kennedy

5) Which foreign country is closest to the United States without actually touching its border?
[a] Cuba
[b] Russia
[c] Bahamas
[d] Greenland

6) Which Ivy League school was the first to admit women?
[a] Cornell
[b] Brown
[c] Yale
[d] Dartmouth

7) In Earth time, how long is a "day" on the Moon (from one sunrise to the next)?
[a] 108 minutes
[b] 96 hours
[c] 28 days
[d] 6.1 months

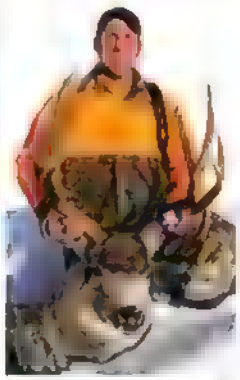
8) What 82-year-old celebrity competed on *Dancing with the Stars*, becoming the show's oldest contestant to date?
[a] Buzz Aldrin
[b] Cloris Leachman
[c] Jerry Springer
[d] George Hamilton

9) Which U.S. state had the smallest population gain over the past century?
[a] Rhode Island
[b] Utah
[c] North Dakota
[d] West Virginia

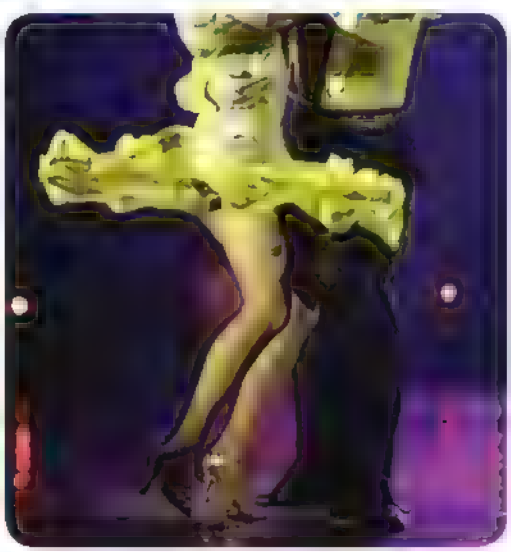
10) Founded in 1991, which cable network changed its name to TruTV in 2008?
[a] Reality 24/7
[b] C-SPAN
[c] Outdoor Life Network
[d] Court TV

11) Hershey's Mr. Goodbar candy bars come in what color wrapper?
[a] red
[b] brown
[c] orange
[d] yellow

12) An eight-point buck is a male deer that boasts which of the following?
[a] an 8-inch space between his ears
[b] 8 muscle points on his legs
[c] 8 spines on his antlers
[d] a score of 8 on the RDS scoring system



13) Which legendary creature was described as being "gray" and "about six feet" when first spotted in 1933?
[a] The Loch Ness Monster
[b] Bigfoot
[c] The Abominable Snowman
[d] The Jackelope



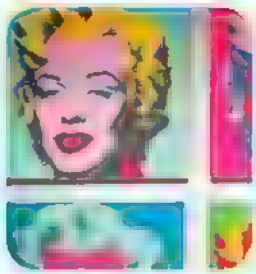
• ERASE COMPLETELY ⟵ READ THIS DIRECTION ⟶

14 Which one of these well-known artists died before the turn of the 20th century?

[a] Picasso

[b] Renoir

[c] Manet



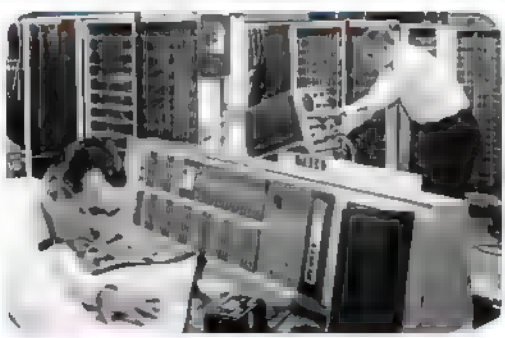
[d] Warhol

15) Which comedian honed his act on the TV sketch comedy show *In Living Color*?
[a] Dave Chappelle
[b] Jim Carrey
[c] Tyler Perry
[d] Martin Lawrence

16) A "logologist" is an authority on which of these subjects?
[a] words
[b] colors
[c] skyscrapers
[d] design

17) What kind of playing pieces are used in the Milton Bradley game Connect Four?
[a] checkers
[b] dice
[c] marbles
[d] cards

18) Which of these high-level computer programming languages is the oldest?
[a] FORTRAN
[b] BASIC
[c] COBOL
[d] LISP



19) Which of these common battery types is the tallest?
[a] AAA
[b] AA
[c] C
[d] D

20) A "caldera" could be found in which type of natural formation?
[a] canyon
[b] glacier
[c] volcano
[d] coral reef

21) Which pop vocalist, who shared his name with a popular food, had a hit with his 1983 remake of "Puttin' on the Ritz"?
[a] Hot Dog
[b] Taco
[c] Cole Slaw
[d] Chicken Tender

22) Sci-fi author Jules Verne earned a college degree in what discipline?
[a] law
[b] economics
[c] astronomy
[d] physical education

23) Balbinus, Pertinax, and Domitian are the names of three:
[a] Roman emperors
[b] heart medications
[c] constellations
[d] flower species

24) Sales of what fruit plummeted in 1989 amid false rumors about a cancer-causing chemical known as Alar?
[a] grapes
[b] apples
[c] pears
[d] bananas

25 Which of the following beef dishes typically includes sour cream as an ingredient?

[a] Beef Wellington
[b] Beef Bourguignon
[c] Beef Stroganoff
[d] Beef Brisket

ANSWERS

1) c 2) b 3) a 4) c 5) b *[At its closest point, Russia lies within 2.5 miles of Alaska.]* 6) a 7) c *[All points on the Moon receive 14 days of light, followed by 14 days of darkness.]* 8) b 9) c *[North Dakota's population has increased from 577,000 in 1910 to only 647,000 in 2010.]* 10) d 11) d 12) c 13) a 14) c 15) b 16) a 17) a 18) a *[FORTRAN was developed by IBM in 1954.]* 19) d *[D batteries are the tallest of the four followed by AA, C, and AAA.]* 20) c *[It's the depression that remains after a volcano erupts and collapses upon itself.]* 21) b *[The Dutch singer's full name was Taco Ockerse.]* 22) a 23) a 24) b 25) c

SCORING

0-10	PRETTY GOOD
11-15	THE BEST
16-20	THE WORST
21-25	ALSO PRETTY GOOD

MORE **Can't Get Enough Trivia?**
Check out the Daily Lunchtime Quiz at mentalfloss.com

6° OF KEN JENNINGS

JULIUS CAESAR & JULIUS ERVING

We're throwing trivia king Ken Jennings two people, places, or things and seeing if he can connect the factual dots.

1° As a young man, **Julius Caesar** was kidnapped by Cilician **pirates** in the Mediterranean. He escaped with his life, but other captives weren't so lucky. In fact, if a prisoner protested that he was from Rome, the pirates would dress him in a toga and mock him, pretending to tremble in fear. Then, they'd lower a ladder into the middle of the sea and tell the prisoner he was free to go. If the Roman refused to drown himself, the pirates would just throw him overboard. Worst toga party ever!

2° There's no evidence that real-life **pirates** ever said "Arr!" However, it is true that they carried **parrots** aboard their ships. Some served as lovable pets, while others were kept on hand as bribes. But Polly had another purpose, too. According to 17th century buccaneer Captain William Dampier, hungry pirates off the coast of Venezuela were known to feast on the exotic birds for dinner.

3° When **parrots** talk, scientists listen. In 2004, an African Grey named N'kisi made headlines for his language skills. Not only did he wield a **900-word vocabulary**, but he also exhibited a sense of humor. Upon meeting Jane Goodall for the first time, N'kisi's first question for the famed primate researcher was, "Got a chimp?"

4° When L.L. Zamenhof set out to create Esperanto in the 1880s, he limited the language to a **900-word vocabulary**. That's all the root words he believed people needed to communicate. Among those who speak the universal language is William Shatner, who starred in *Incubus*, the 1965 B-movie filmed entirely in Esperanto. But Shatner's skills could use refining. Esperantists say the Canadian, who attended Montreal's **McGill University**, speaks the language with a French accent.

5° After a 1926 performance at **McGill University**, Harry **Houdini** was approached by student J. Gordon Whitehead, who asked the magician if it was true that he could withstand any blow to the upper body. Houdini replied that he could, but didn't have time to tense up before Whitehead abruptly hit him three times in the gut. Unbeknownst to either man, the sucker punches were bad news for Houdini's appendicitis, and the magic man died 11 days later.

6° During a summer basketball tournament in Harlem in 1971, an announcer kept trying out nicknames for one of the players, a junior at the University of Massachusetts. After enduring names like "**Houdini**," "Little Hawk," and "the Claw," the irritated player finally suggested a nickname from his high school days. "If you're going to call me anything," he told the announcer, "just call me the Doctor." From then on, **Julius Erving** has been known as Dr. J.

Special thanks to Ryan Sellers of Cordova, Tenn., for sending in this Six Degrees pairing.

THINK YOU CAN STUMP KEN?
To challenge the champ, send an email to "Six Degrees" at sixdegrees@mentalfloss.com.

IMAGE CREDITS

COVER: Einstein © Bettmann/Corbis

TOC: Antarctica © NASA; Favela Painting courtesy The Firmeza Foundation; General Lee surrendering © Bettmann/Corbis; Lego Robot courtesy Lego; George Washington by Horatio Greenough © Hugh Talman/Smithsonian Institution; Neil Diamond © Douglas Kirkland/Corbis; Barbra Streisand © Everett Collection; High school couple © Norma Zuniga/Getty Images; Gershwin at the piano © Everett Collection; Cholita fashion show © Martin Alipaz/epa/Corbis; Llama © Theo Allofs/Corbis; Mosquito © Remi Benali/Corbis; Hunter with buck © Dale Spartas/Corbis; Caesar © Everett Collection; Julius Erving © Dick Raphael/NBAE/Getty Images

MAIL BONDING: Chicken © Russell Glenister/Corbis

ED LETTER: Party © Anne Domdey/Corbis

SCATTER_BRAINED: Duct Tape Prom courtesy Duck Brand Duct Tape Stuck at Prom Contest; Fidel Castro © Lester Cole/Corbis; High school hallway © Radius Images/Corbis; Neil Diamond © Douglas Kirkland/Corbis; Barbra Streisand © Everett Collection; High school couple © Norma Zuniga/Getty Images; Rob Lowe © Sergio Gaudenti/Kipa/Corbis; Emilio Estevez © CinemaPhoto/Corbis; Sean Penn © Sunset Boulevard/Corbis; Charlie Sheen © Frank Trapper/Corbis; Cheerleader © Image Source/Corbis; Peanut Butter and Jelly Sandwich © Cary Norton; Woman with slicer © Hulton-Deutsch Collection/Corbis; Betty Grable © Bettmann/Corbis; Measuring Cups © Riou/SoFood/Corbis; Kentucky Derby © Mark Abraham/epa/Corbis; Tattooed Man © Corbis Images; MeeMaw © Tim McGuire/Corbis; Hulk Hogan © Wally McNamee/Corbis; Bill Clinton © Wally McNamee/Corbis

RIGHT BRAIN/GERSHWIN: Men looking at New York © Blue Lantern Studio/Corbis; Sheet music for Rhapsody © Everett Collection; Gershwin at the piano © Everett Collection; Brian Wilson © Neal Preston/Corbis

LEFT BRAIN/MALARIA: Arm with mosquitos © Remi Benali/Corbis; Dr. Stephen Hoffman © Katja Heinemann/Aurora Select/Corbis; Mosquito © Remi Benali/Corbis

MIT: SixthSense Demonstration © Sam Ogden; Media Lab Building © Andy Ryan; Prototypes courtesy MIT Media Lab; Guitar Hero Screenshot courtesy Activision; Playing Guitar Hero © Mark Dye/Star Ledger/Corbis; Prototype of Inexpensive Laptop © MIT Media Lab/epa/Corbis; Kindle courtesy Amazon.com; Lego Robot courtesy Lego; Ankle Prototype © Webb Chappell

ARTWORKS: Man at the Crossroads by Diego Rivera © Michael Freeman/Corbis; Portrait of George by Bob Arneson © Brian Fitzgerald; George Washington by Horatio Greenough © Hugh Talman/Smithsonian Institution; Entropa by David Cerny © Olivier Hoslet/epa/Corbis

COVER STORY: All illustrations © Winslow Taft; Sand Dune, Iran © George Steinmetz/Corbis; Tommy Lee Jones © Michael Childers/Sygma/Corbis; Rep. Al Gore © Bettmann/Corbis; Warren Buffett © Rick Wilking/Reuters/Corbis; Chelsea Hotel © Gail Mooney/Corbis; Antarctica © NASA; Favela Painting courtesy The Firmeza Foundation; General Lee surrendering © Bettmann/Corbis

BOLIVIA: View of La Paz © Pablo Corral Vega/Corbis; Gas Girl © Grisberth Alvaro Olmos; Tinku Fight © Reuters/Corbis; Llama © Theo Allofs/Corbis; Vinchuaca Bug © STR/Reuters/Corbis; Thatched Roof © Cesare Gerolimetto/Grand Tour/Corbis; Cholitas © David Mercado/Reuters/Corbis; Evo Morales performing ch'alla © Martin Alipaz/epa/Corbis; Miss Bolivia 2003 © Reuters/Corbis; Cholita fashion show © Martin Alipaz/epa/Corbis

SIX DEGREES: Caesar © Everett Collection; Julius Erving © Dick Raphael/NBAE/Getty Images

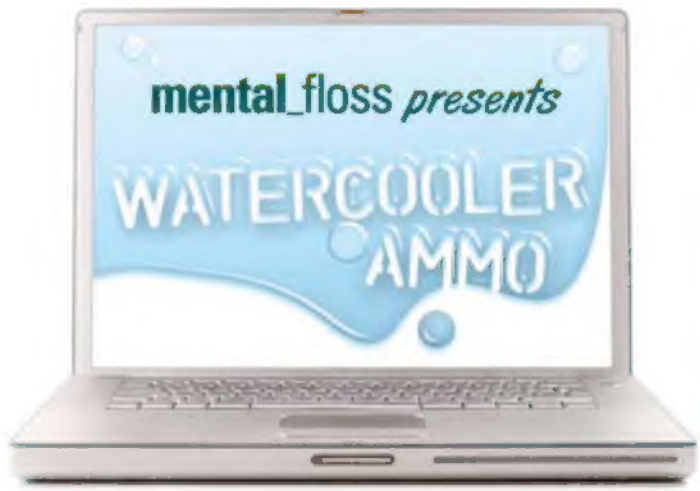
QUIZ: Professional dancers © Jason Redmond/Reuters/Corbis; The Fifer by Edouard Manet © The Gallery Collection/Corbis; Marilyn by Andy Warhol © Andy Rain/epa/Corbis; Portrait of Dora Maar by Pablo Picasso © The Gallery Collection/Corbis; Dance at Bougival by Pierre-Auguste Renoir © Burstein Collection/Corbis; Hunter with buck © Dale Spartas/Corbis; Cow © Sam Wirzba/AgStock Images/Corbis; Jack Ruby mugshot © Bettmann/Corbis; IBM Data Processing System © Underwood & Underwood/Corbis

EDITORIAL SOURCE CREDITS

Sources for articles available upon request.

mental_floss | volume 9, issue 4
July/August 2010
mental_floss (USPS#021-941) (ISSN#1543-4702) is published bimonthly by Mental Floss LLC, 2829 2nd Ave. S., Suite 340, Birmingham, AL 35233. Periodical postage paid at Birmingham, AL and additional mailing offices. POSTMASTER: Send address changes to Mental Floss c/o Palm Coast Data, P.O. Box 421142, Palm Coast, FL 32142

Get one email a day *guaranteed* to make you smile.



Every Monday through Thursday, we'll send you one perfectly curated, smile-inducing story, like:

The bear that won a medal of honor

How Hello Kitty keeps renegade cops in line

A hideous insect that will win your heart

The man who performed his own appendectomy

Sign up today at
mentalfloss.com/watercooler

FUNNY EPITAPHS

"EXCUSE MY DUST"
DOROTHY PARKER (1893-1967)

"THAT'S ALL, FOLKS!"
MEL BLANC (1908-1989)

"THERE GOES THE NEIGHBORHOOD"
RODNEY DANGERFIELD (1921-2004)

"I WILL NOT BE RIGHT BACK AFTER THIS MESSAGE"
MERV GRIFFIN (1925-2007)

3 Ordinary Words with Extraordinary Eponyms

TAWDRY
This disrespectful word takes its meaning from a most respectful woman—St. Audrey, patron saint of Ely, England. Audrey was a notable woman who loved to wear lace around her neck. After she died in 679 CE, the fashion took off, and the good people of Ely took to calling it "t'Audrey's Lace." But when mass-production ensued and quality dropped, people started referring to the cheap accessories as "tawdry."

DOILY
One draper in 17th-century London was so well known for being a cloth connoisseur that people started referring to their fancy tea napkins by his name—Mr. Doyley. Alas, his first name has been lost to history.

BOYCOTT
Sometimes, having a word named after you isn't a good thing. That's what happened to Charles Cunningham Boycott, a landlord in Ireland who set the price of rent so ridiculously high that his tenants rebelled. The entire region stopped selling him basic goods to protest the unfair treatment, and Boycott had to flee the "boycott" just to survive.

—MELISSA SANDOVAL

BY STACY CONRADT

MORE!
10 Snack Foods Originally Sold as Medicines
10 Words Invented by Authors
+ Plenty MORE Quick 10 lists at mentalfloss.com/more

Duke UNIVERSITY

CRAZY SMART

Alia Kamal, '10

- Chemistry major with a concentration in Biochemistry
- International student from Bangladesh
- Avid Painter
- Created an afterschool art program for local elementary students
- Studied in Tanzania with DukeEngage
- Mentored students on health and body image through Healthy Devils
- Taught with Literacy through Photography
- Researched HIV-1 vaccine design
- Cheered passionately as a member of the Cameron Crazies

Duke University. Crazy Smart.

duke.edu